

# MANUFACTURING MATTERS

## Lt. Governor Kathy Hochul Supports CNY STEM and PEB *AT&T Sponsors STEM Camp for Young Women*



Lt. Governor Kathy Hochul made a visit to the CNY STEM Hub Summer Camp for Young Women in July at Le Moyne College. She shared some remarks about the importance of the opportunities available to women in STEM fields. She stated that 50% of the jobs that will be available to students currently in middle school haven't even been created yet. The Lt. Governor was joined by Marissa Shorenstein, Senior Vice-President of AT&T Eastern Region along with Dr. Linda Le Mura, President of Le Moyne College.

Thirty high school age campers were chosen representing 11 urban, suburban, and rural school districts. The young women took part in hands-on activities, including coding and a soldering practice activity which was needed to then build mini-drones. To broaden their understanding of the

drone technology, campers visited the Control Tower at the Syracuse International Airport to get a first-hand view of air traffic in the Syracuse to Rome corridor.

Evaluations from camp also showed that the hands-on activities were the most popular, especially building the drone kits. Most of the hands-on activities involved working in small groups which gave the young women the opportunity to work on their communication and problem-solving skills.

The success of the camp can be proven in many ways; from the perfect attendance record during the week, the engagement of campers, postings on social media, and camper evaluations where 93% of students said they would attend this camp again if offered and 93% would recommend it to a friend.

The main goal of this camp was to bridge the huge gender gap in STEM careers. The CNY STEM Summer Camp for Young Women successfully achieved this because 93% of the campers said they were now interested in a STEM career!

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- meet our staff and, more importantly, have an opportunity to meet other MACNY members and learn more about what they do in our community?

We are excited to be holding Maximize Your Membership sessions on the second Thursday of each month from 9 AM - 10 AM.

Mark your calendars for our next three meetings...

**September 14    October 12    November 9**

Please contact Cindy Nave at [cnave@macny.org](mailto:cnave@macny.org) or 315-474-4201 ext. 11 to sign up for any of our upcoming sessions!

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## WELCOME OUR NEW MEMBERS...

### **NYMAT MACHINE TOOL CORP.**

NYMAT sells and services machine tools as well as tools and CAM software.

Visit them at: <http://www.nymat.com>

### **FuzeHub**

As the statewide Manufacturing Extension Partnership Program (MEP) Center for New York State, FuzeHub works to better connect New York's small and mid-sized manufacturing companies to the resources, programs, and expertise they need for technology commercialization, innovative solutions, and business growth.

Visit them at: <http://www.fuzehub.com>

If you know of companies that could benefit from a MACNY membership, please contact Julianne Pease at 315-474-4201 ext. 19 or [jpease@macny.org](mailto:jpease@macny.org).



# PRESIDENT'S MESSAGE



Randy Wolken  
President & CEO

## Growth is a Choice

Growth is a choice for individuals, teams, and companies. In today's hyper-competitive environment, we must choose a growth strategy to be successful. So, what does your growth strategy look like?

### Company Growth

As a company, your business success is no longer only driven by what your company does. The game has changed. Manufacturers and businesses must increasingly participate in new ways to be successful in the 21st Century. Countries now compete to help create clustered technology-driven industries that can excel in the global marketplace. Therefore, your company must learn to actively pursue efforts to be part of regional and super-regional industry clusters. Successful clusters can significantly improve the return on private and public investments in research and development and provide global leadership in key technologies. So what does a successful regional cluster look like? Successful regional clusters need to:

- **Leverage local strengths:** Regional innovation cluster initiatives should be built upon existing knowledge clusters and comparative strengths of a geographic region.
- **Encourage self-organization:** Clusters should be developed from the ground up. Private businesses, local education institutions, and economic development agencies are in the best position to identify opportunities, gauge competitive strengths, and mobilize community-wide support.
- **Pool resources and share risks:** Cluster initiatives maximize their impact by pooling resources and organizing programs in a comprehensive way while sharing risks.
- **Grow a trained workforce:** An entire ecosystem needs to be in place including provisions for workforce training.

- **Connect clusters with local universities and labs:** Government-funded research in universities and national labs must be coordinated with regional innovation clusters so they can provide the context for practical growth opportunities.
- **Secure long-term commitments:** Corporations must know that federal and state incentives and support for research infrastructure will be consistent, predictable, and sustainable.
- **Secure incentives:** Public incentives are often necessary. Given the increasingly intense global competition in key industries, government seed grants, loan guarantees, tax credits, and other financial incentives are critical to influence corporate decisions on where to locate corporate research and development and manufacturing investments.
- **Monitor and measure:** Performance must be monitored and measured. Measuring performance is important to gauge which tools work, making a compelling case for continued public support, and keeping a focus on results.

If you are interested in company-driven cluster growth, contact us here at MACNY. We have facilitated a new cluster launch within the aerospace industry. The Aerospace Alliance of Upstate New York (AAUNY) is just one example of how clustering can and does work. If you are interested you can contact Cindy Oehmigen at [coehmigen@macny.org](mailto:coehmigen@macny.org).

### Individual Growth

Another critical area of growth resides within our teams at the individual level. The capabilities of our organizations are driven by the speed at which our individual performers are acquiring new skills. With each passing day, new technologies and new competitors are emerging. Does your company have a strategy to keep up and excel? Have you empowered individuals in your company to seek their own growth strategy? These are important competitive questions for all organizations.

MACNY offers great opportunities for individuals to excel at their professional growth. We have hundreds of events and training opportunities offered annually as well as guidance and coaching for leaders at all levels within an organization. Our fastest growing offering, Individual Membership, offers over 60 learning events with our councils and mastermind group, online learning tools, and discounted training to help everyone in an organization grow. Hundreds of MACNY members are now using this tool to stay competitive and gain important skills. For more information about Individual Membership, contact Marisa Norcross at [mnorcross@macny.org](mailto:mnorcross@macny.org).



Karyn Burns

VP, Government Relations & Communications

## **Business Groups Call for the Withdrawal of Nominee For Export-Import Bank Chairman**

For decades now, the United States Export-Import (Ex-Im) Bank has operated by maintaining and supporting their mission to support United States jobs through exports. You may recall a few years back when the reauthorization of the Ex-Im Bank was under review, and MACNY stood alongside many of its association groups and member companies in our full-fledged support of seeing it remain open and operating. We were successful in our mission, and with the reauthorization, the Ex-Im Bank has continued to operate as necessary and provided the much needed support for our nationwide manufacturers.

Back in April, President Trump himself confirmed his support for the export credit agency. This made sense to us, because after all, who in a position of power would want to oppose a small federal agency that provided such a significant and tangible benefit to the U.S. economy and our manufacturers and businesses?

That is what had us all shaking our heads when it was announced that a former Congressman who has been nominated to lead the Ex-Im Bank, is one of those people. Scott Garrett, a Former Republican Congressman from New Jersey, has been nominated to lead the agency, and just so happens to have been a longtime vocal opponent of the Export-Import Bank.

This has caused a number of advocacy groups such as the National Association of Manufacturers (NAM) to publicly state the severe ramifications and negative impact for manufacturers should the Senate decide to move for a confirmation of Garrett as the leader of the Ex-Im Bank. MACNY agrees with NAM and our additional advocacy colleagues who are calling for the Senate to not allow for the confirmation to go through, and stand firm in the negative impact a nomination of a person so adamantly opposed to

the Ex-Im Bank itself will have on our nation's manufacturing sector as a whole.

On July 12, 2017, NAM CEO Jay Timmons submitted an Op-Ed to the Wall Street Journal outlining this impact, and stated, "Congressman Garrett built a record of votes and statements that sought to dismantle the Ex-Im Bank. He looks to close the agency at every opportunity and voted against a reauthorization bill in October 2015 that passed the House with overwhelming Bipartisan support. Before the vote, he took to the House floor to mischaracterize the agency as a 'fund for corporate welfare' and urged his colleagues to 'keep the Export-Import Bank out of business.'"

Moreover, when Garrett voted against the agency's reauthorization again later in 2015, he issued a statement of explanation that his opposition to the bill was because it would "resurrect the most shameless example of crony capitalism Washington has ever concocted." Additionally, in 2012, Garrett voted against the reauthorization, a bill that was again strongly approved by both the House and Senate.

All of this shows Garrett's clear disdain for the Export-Import Bank, which makes it troubling for us to stand by as he is under consideration by the Senate to chair the very same bank that he wants to see dismantled.

Our reasons for maintaining the benefits of the Export-Import Bank are not only plentiful, but tangible: United States export sales by the Ex-Im Bank have directly supported 1.4 million jobs over the past seven years alone. In 2016, approximately 90% of the Ex-Im Bank's transactions—totaling more than 2,600 deals—directly supported small businesses. The Ex-Im Bank has also generated \$7 Billion for taxpayers in the past 20 years, most of that being from fees collected from foreign customers. Lastly, the Agency is a self-sustaining entity and covers its own operating costs. In fact, an elimination of the Ex-Im Bank would actually cause an increase in the U.S. deficit, as the agency transferred \$284 million in deficit reducing receipts to the United States Treasury in 2016. (Source: National Association of Manufacturers)

It is our strong belief that the Ex-Im Bank plays a critical and strategic role in the security, strength, and growth of our American jobs and workforce, and with the recent nomination of Garrett under consideration, this is all in grave jeopardy. The Ex-Im Bank instead needs a leader who believes in its many benefits, and will look to ensure it can function at its full potential rather than looking to dismantle it.

We support NAM in calling for President Trump to withdraw the nomination of Scott Garrett as the leader of the Ex-Im Bank.



Cindy Oehmigen  
Director of Energy and Corporate Services

## Pass The Salt, Please

It is common knowledge that one of the big challenges for committing to renewable energy sources is reliability. Hard to make the lights go on with solar when the sun goes down. Or how about those calm, beautiful days when there is no wind. Our homes and factories just keeping pulling at the outlets to be fed electrons. How do we store the energy when we can capture it so that it is available for use when we need it? There is a lot of research and development taking place across the world to solve this dilemma.

As I was contemplating this topic, energy storage, I stumbled across an intriguing approach to the energy storage challenge. Interesting for many reasons. First, the 'who' that is working on this research-Google! I admit I am not an expert on many things, but I was completely unaware that Google is a part of a collection of companies that make up Alphabet, Inc., a relatively new investment firm founded in 2015 by the original founders of Google, Larry Page and Sergey Brin.

According to Larry, the idea to form this investment firm was driven by the desire to keep re-inventing and remaining relevant:

*"We've long believed that over time companies tend to get comfortable doing the same thing, just making incremental changes. But in the technology industry, where revolutionary ideas drive the next big growth areas, you need to be a bit uncomfortable to stay relevant."*

*What is Alphabet? Alphabet is mostly a collection of companies. The largest of which, of course, is Google. This newer Google is a bit slimmed down, with the companies that are pretty far afield of our main internet products contained in Alphabet instead. What do we mean by far afield? Good*

*examples are our health efforts: Life Sciences (that works on the glucose-sensing contact lens), and Calico (focused on longevity). Fundamentally, we believe this allows us more management scale, as we can run things independently that aren't very related."*

It is through this investment in technology that Google came to be engaged in the energy storage business, the second item I found to be of interest. Now enter Alphabet's secretive X skunkworks lab who is working on solving the energy storage problem with salt and antifreeze, a project code named Malta.

Bloomberg Technology's Mark Bergen reported:

*"The research lab, which hatched Google's driverless car almost a decade ago, is developing a system for storing renewable energy that would otherwise be wasted. It can be located almost anywhere, has the potential to last longer than lithium-ion batteries and compete on price with new hydroelectric plants and other existing clean energy storage methods, according to X executives and researchers."*

*Two tanks are filled with salt, and two are filled with antifreeze or a hydrocarbon liquid. The system takes in energy in the form of electricity and turns it into separate streams of hot and cold air. The hot air heats up the salt, while the cold air cools the antifreeze, a bit like a refrigerator. The jet engine part: Flip a switch and the process reverses. Hot and cold air rush toward each other, creating powerful gusts that spin a turbine and spit out electricity when the grid needs it. Salt maintains its temperature well, so the system can store energy for many hours, and even days, depending on how much you insulate the tanks."*

Perhaps the Salt City will become the center of energy storage, making Governor Cuomo's ambitious REV goals (50% electricity from renewables by 2030) an easier lift!

# LIVE2LEAD

## WHAT IS LIVE2LEAD?

**LIVE2LEAD** is an interactive broadcast facilitated by **David Freund, MACNY's Chief Leadership Officer**. It is a leader development experience designed to equip you with new perspectives, practical tools, and key takeaways. You'll breathe new life into your leadership during this information-packed day-long event. Learn from world-class leadership experts and return to your office ready to implement your new action plan and lead with renewed passion and commitment.

## THE SPEAKERS



**JOHN C. MAXWELL**

Leadership Expert, *New York Times* Bestselling Author, and Coach



**DAVE RAMSEY**

Personal Money-Management Expert, Bestselling Author



**CHERYL BACHELDER**

Former CEO, Popeyes Louisiana Kitchen, Inc.



**WARRICK DUNN**

Former NFL Running Back, Partner of the Atlanta Falcons

## WHAT YOU'LL GAIN

### RENEWED ENERGY

Live2Lead is designed to deliver the very best leadership content that inspires and motivates all who attend.

### NEW RELATIONSHIPS

Grow your own leadership as you connect with other influencers in your local community. Expand your network with relationships that produce tangible results.

### NEW IDEAS

Live2Lead is a world-class leadership experience packed into a day-long format, full of rich content, key takeaways and easy-to-implement action plan.

## EVENT DETAILS

**DATE:** Friday, October 20, 2017

**TIME:** 9 AM – Check In | 9:30 AM to 3:30 PM – Program, including lunch

**LOCATION:** The Lodge at Welch Allyn, Skaneateles Falls

**PRICE:** \$125 per person

**ONLINE REGISTRATION:** Visit <https://www.macny.org/live2lead/>



David Freund  
Chief Leadership Officer

## Silence or Violence

Recently I was faced with a dilemma that tested whether I believe and practice what I teach. I thought this would be a great opportunity to show you some **Crucial Conversation** tools in action. If you are familiar with the **VitalSmarts Crucial Conversations** course, you may understand where this is going, but either way, it's an important lesson.

The church that my family attends had invited a men's choir to visit on a specific weekend this Summer. As is our custom, we host choir members in our homes and our family was planning to have overnight guests. Ten days before the choir visit, our daughter went into labor with her third child. Within in a few days, my wife headed to Ohio to help the growing family, and you guessed it, I needed to host the overnight guests without my (much) better half. Wanting to make things easier for me, my wife asked that our guests be boys my son's age so I wouldn't need to make too much of a fuss. Well, as it turned out, it wasn't a few boys but a total of five people. A father of three little girls and another gentleman in the choir. A bit stressed about fixing a meal and entertaining on my own, I moved on with the best mindset possible. After all, how tough can it be to host people for one night?

Immediately after the Saturday evening choir program, I met up with one of my house guests, and he informed me that they wanted to stay two nights. All five of them. Now I was really struggling. Not only was my (much) better half four hundred miles away, but I needed to work on training materials Sunday afternoon and evening. How was I going to entertain two adults and three little girls while accomplishing my tasks? So many emotions ran through my head. My heart began to race, my muscles tensed up, and I had a choice to make -- go to silence or violence. Or did I have an alternative?

I needed to start with my heart. What did I want for myself and my guests? Was there a relationship that I wanted to

maintain? Did the work I felt I needed to do really need to get done on a Sunday afternoon and evening. The answer to both of these questions was a definite yes. I wanted to maintain a good relationship with my guests and I most definitely needed to get the work done before Monday morning. My next step was to see if I was making myself a victim, a villain, or telling myself a helpless story. After some careful analysis, I concluded that my assessment was accurate, and I needed to move into a **crucial conversation**.

To start the conversation, I simply shared my facts. I wasn't aware that they planned on staying until Monday and that I would need to go to my office Sunday afternoon to complete and print my training materials. In addition, I would need to spend time Sunday evening prepping for a Monday class. I expressed that I was very sorry and didn't want them to have to return home a day early. Once I had opened the conversation, I needed to get their input, so I asked if they had any ideas. Was there anything they could think of that would work for both of us? After a few minutes of conversation, it was decided that they would entertain themselves Sunday afternoon and evening. All they needed from me was a place to sleep Sunday night, and breakfast on Monday morning.

I know this sounds simple, but in the heat of the moment, I started to think that I only had two choices, keep quiet and have my entire weekend ruined or tell them they couldn't stay which would have ruined not only my weekend but our relationship. With a few simple, crucial conversation skills, we reached a solution that all of us could live with. I got my work done, they stayed until Monday morning, and the relationship is in tact. Next time you are faced with a difficult situation, why not try having a crucial conversation. If this is the first you have heard of **VitalSmarts' Crucial Conversations** course, why not join us for our next class.



Patty Clark  
HR Services Manager

## Is It Good For Your Staff To Leave Early on Fridays?

My co-workers know I look forward to leaving early on Fridays between Memorial Day and Labor Day. I even have an unofficial countdown for the following year starting after Labor Day. I always tell them they enjoy it just as much as I do, I just express it more. With the unofficial end of Summer upon us, I thought it would be interesting to see if other companies have some sort of “Summer Friday” arrangement and how it can affect staff.

According to an article written by Jena McGregor in the LA Times, a 2017 survey of Fortune 1000 companies conducted by CEB, a research and consulting firm in Arlington, Virginia, showed that 42% of companies (up from 21% in 2015) now start the weekend early during the summer with some sort of modified work schedule. Examples of a modified work schedule or alternative work schedule could include:

- Flextime: where an employee works eight hours per day but there is flexibility with start and stop times. This is a great alternative for family obligations or for those who just prefer to start earlier or later in the day.
- Four day workweeks: working four 10-hour days allowing the employee to have a three day weekend each week.
- Job sharing: job sharing allows an employer to have two part-time employees working together to accomplish the duties of one full-time employee.

Leaving early or working longer days during the week and having Fridays off is an extra benefit a company can usually afford to give their employees. It is seen by some companies as another way to engage their employees. It does not cost them much and employees enjoy it. Companies are not always able to provide big raises, bonuses, or endless opportunities for advancement. A flexible work schedule,

including leaving early on Fridays, is a way for companies to give their employees additional benefits at little cost. A company can easily remove this type of benefit if needed when a business falters or if there is a need to return to a normal schedule.

A flexible work schedule, a shortened work week, or just leaving early on Fridays can do wonders for an employer as well as the employee. An employer could experience benefits such as an increased employee morale, increased employee engagement, reduced absenteeism, reduced turnover, and the ability to recruit exceptional employees. A flexible work schedule or a shortened work week is also good for the employee. An employee will have increased flexibility to meet family or personal obligations, reduced burnout, and an overall better feeling of work-life balance.

Although many manufacturing companies are not able to allow their production workers to leave early, there is an increasing number who are trying a modified work schedule during the week. This is one way to alleviate the benefit divide that sometimes exists between the office workers and the production workers.

Having a flexible work schedule or leaving early just one day a week can make an employee feel appreciated while an employer can benefit from positive morale and increased productivity. It may not seem like a lot but it can have a larger impact than expected.

Have thoughts on this topic? Please send them to me directly at [pclark@macny.org](mailto:pclark@macny.org).

Sources for the article:

<http://www.latimes.com/business/la-fi-summer-job-perks-20170615-story.html>

[https://www.shrm.org/resourcesandtools/tools-and-samples/policies/pages/cms\\_000593.aspx](https://www.shrm.org/resourcesandtools/tools-and-samples/policies/pages/cms_000593.aspx)

<https://www.thebalance.com/advantages-and-disadvantages-of-flexible-work-schedules-1917964>



## Hot Off The Line

**Q** - We are preparing for the Paid Family Leave that becomes effective January 1, 2018 and began deducting from our employee's paycheck on July 1, 2017. An employee has given their notice and will be leaving the company as of 9/15/17. Am I required to refund any of the money we have deducted from her paycheck up to that point for the Paid Family Leave?

**A** - According to the most current regulations, an employer is not required to refund any of the money that was deducted for the Paid Family Leave when an employee leaves the company.

## HR Stats & Facts

- 15% of the air you breathe in a metro station is human skin. *Source: www.metro.us*
- In a recent survey, 71% of office workers stopped on the street agreed to give up their computer passwords in exchange for a chocolate bar. *Source: www.owlcation.com*
- Unfair compensation (41%), unreasonable workload (32%), and too much overtime/after-hours work (32%) are the top three contributors to employee burnout. *Source: www.kronos.com*

## DID YOU KNOW?

If you are a first-tier government contractor with \$50,000 or more in federal government contracts and 50 or more employees at one location; or, a second-tier government contractor (supplies to a first-tier contractor) with \$50,000 or more in contracts and 50 or more employees at one location you are required to have an Affirmative Action Plan. MACNY can audit your plan, rewrite it, or create one for you as well as complete your Adverse Impact. If you are interested in receiving a quote or would like additional information please contact Patty Clark, HR Services Manager at 315-474-4201 x 10 or pclark@macny.org.

# CPI

Wage/Clerical	June	May	Pt. Chg. (Mo.)	% Chg. (Mo.)	% Chg. (Yr.)
1967=100	711.4	710.7	0.7	0.1%	1.5%
1982-84=100	238.8	238.6	0.2	0.1%	1.5%
<b>Urban</b>					
1967=100	733.8	733.1	0.7	0.1%	1.6%
1982-84=100	245.0	244.7	0.3	0.1%	1.6%
<b>Unemployment Rates</b>					
June - Onondaga County: 4.7; Metropolitan Syracuse Area (MSA): 5					

# SUMMER EVENTS!

## Annual Golf Tournament at Bellevue Country Club

July 24, 2017

Congratulations to this year's golf tournament winners from The Onondaga County Water Authority! OCWA's team included Mike Hooker, Sr., Mike Hooker, Jr., Jeff Brown, and Clifton Carden!

We would also like to send a special thank you to all of our members that participated, especially our sponsors:

- Advance Media New York
- INFICON
- Direct Energy
- Dannile & McKee, CPAs
- C&S Companies
- Sage X3
- Excel Machine Technologies
- Buckeye Corrugated--Empire Division
- Lockheed Martin
- Firley, Moran, Freer & Eassa, CPA, P.C.
- Ruston Paving
- Haun Welding
- Thompson & Johnson Equipment
- CNY PGA



## Happy Hour at Greenwood Winery

August 2, 2017



August 2nd was a beautiful night for Happy Hour at Greenwood Winery!

Thank you to all of our members who came out to join us.

We would especially like to thank Harris Beach for sponsoring such a wonderful event.



# Annual Clambake at Hinerwadel's

## August 16, 2017

Thank you to all of our members that came out to Hinerwadel's for our Annual Clambake! We hope you all enjoyed yourselves and will join us again next year.

Many thanks to INFICON for sponsoring our music for the evening.





Joe Vargo  
Executive Director  
Partners For Education & Business

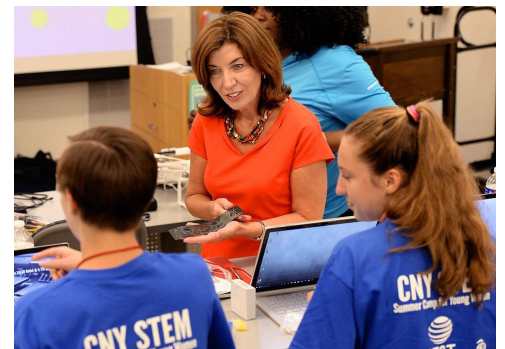
## MACNY Members Engaged in Promoting Careers

### *Summer Programs Impact Students; P-TECH Students Hired for Summer Jobs*

Employment, STEM education, and career exploration activities were all at the forefront of PEB's accomplishments over the summer. During that period, PEB coordinated career speakers, industry visits, networking with top level college students, and the first group of P-TECH summer hires. Program highlights included:

#### **CNY STEM Summer Camp for Young Women- Lt. Governor Kathy Hochul pays a visit!**

Sponsored by AT&T for the second year, the camp is the first and only all-high school girls STEM (science, technology, engineering, math) summer camp which provided 30 high school age girls with a week of STEM-based activities: coding classes hosted by Microsoft; soldering practice needed to build mini-drones; dialogue circles and mentoring with professional women in STEM careers; team-building and communication exercises; and a tour of the Air Traffic Control tower at Syracuse International Airport. This STEM program was developed to encourage women to pursue a career normally dominated by males. The innovative program provided girls in grades 9-12 with an opportunity to gain STEM skills and experiences.



*NYS Lt. Governor Kathy Hochul visits with students during the CNY STEM Summer Camp for Young Women sponsored by AT&T.*

Lt. Governor Kathy Hochul stopped by the camp to address the students and take a tour of their classroom. She was joined by Marissa Shorenstein, Northeast Senior Vice-President of AT&T and Dr. Linda LeMura, President of Le Moyne College.



#### **Syracuse & Auburn P-TECH: First Group of P-TECH Students hired for Summer Jobs!**

The Syracuse and Auburn P-TECH Programs held their annual "Summer Bridge" Program during July and August. The Syracuse juniors visited Gear Motions and Berry Plastics to learn how each company institutes and oversees safety measures. These students will be taking an OSHA 10 class during the school year. The incoming freshman students had presentations from local company representatives, including Steve Rynkiewicz and Tim Larocque from **PaperWorks** and Steve Schill from **INFICON**. Each company provided the students with information about the history of their company, types of jobs employed, and products/services offered. Steve Schill had a PowerPoint that highlighted

some of the equipment manufactured by **INFICON**; he also brought in some samples of thin film sensors and crystals, semiconductor wafers; and more, incorporating the math, chemistry, and physics that are used in designing and operating the equipment. The team from **PaperWorks** used a Continuous Improvement exercise that imitated an assembly line process, helping the students understand and help problem-solve and correct issues that cause delays and errors. Many thanks to the companies who participated!

The Auburn P-TECH students visited **Welch Allyn** and **Currier Plastics**, touring the facilities and getting an inside look at the types of jobs employed there, the manufacturing processes, different departments, and how each team interacts with others.

Four of the Syracuse P-TECH students were able to secure paid summer employment at **United Radio** and **DARCO**. This was the first opportunity for students in the program to find work in manufacturing and represents the growing number of students that will be coming up through the program. An additional eight rising seniors participated in credit-bearing internships in August. **G.A. Braun, Kilian Manufacturing,** and **United Radio** hosted one or two students, providing training in using micrometers and other tools, printing work orders/drawings, shadowing manufacturing engineers, and completing office-based projects helpful to the company. These students are the future manufacturing workforce! For more information about how to get involved, contact Joe or Kathy at 315-448-1012 or [joev@macny.org](mailto:joev@macny.org).

## CNY STEM Scholar Connection – Making Connections for Employment and Internships

An evening networking event was held at **King+King Architects** for the CNY STEM Scholar Connection. Nearly 40 top-level students who are pursuing a STEM-related major in college and are former applicants to the CNY STEM Scholarships were in attendance. The event provided a panel presentation of Human Resource



*Lisa Mondello, Corporate Communications Director for SRC, Inc., discusses future internship positions with a CNY STEM Scholar.*

representatives and recent new hires who offered Dos & Don'ts when looking for an internship, and provided tips on how to effectively network with companies. Students could take advantage of networking opportunities with local business representatives for possible internships or employment. Great food, door prizes, music, and company giveaways made for a friendly and entertaining event. Participating companies, many with job or internship opportunities included: **ADP, Anoplate, INFICON, King+King Architects, Lockheed Martin, National Grid,** and **SRC, Inc.** To gain access to these students for internships or employment, contact Joe Vargo at [joev@macny.org](mailto:joev@macny.org) to join the CNY Tech Sector.



*Fran Emmi, Corporate Recruiter for INFICON, networks with an interested STEM Scholar at the Summer Social event in July.*

## Le Moyne College Liberty Partnerships Program (LPP)

High school students who are enrolled in the LPP Program are offered the opportunity to participate in the program's summer camp each year. This year's theme was based on the environment and how it impacts wildlife, plants, and even our nutrition. PEB assisted in coordinating several of the visits these students took part in during the month of July. The Education Director at the Rosamond Gifford Zoo personally spoke with the group about the animals' diets and took them into the zoo's kitchen to demonstrate what specific species are fed and how those sources of nutrition are obtained. He also included biofacts about several of the zoo's inhabitants. On different days, the group visited S.U.'s Falk College where the students learned about nutrition and made their own pizzas from scratch; Clark Reservation, exploring the habitat, sharing in a fern project with the park's project coordinator and hiking to the cold water springs; touring SUNY ESF's greenhouses, chemistry labs, and viewing the willow project; and taking a birding tour with biologists at Montezuma Wildlife Refuge.

# APPRENTICESHIP UPDATE



Tyler Nakatsu  
Jobs For The Future

## Advancing American Advanced Manufacturing

Madison County, NY - In 2013, the number of states where manufacturing made up the largest share of employment was half of what it was in the 1990s. As American manufacturing entered the 21st century, there were more than 17 million people working in the industry, but after suffering losses during recessions in 2001 and again in 2007, the manufacturing workforce has yet to recover and today stands at just 12.4 million.

In the face of this challenging time for the industry, companies, local workforce systems, and national agencies have been rethinking workforce needs and reimagining how to build a talent pipeline for both the short and long term. This often begins with coming together as community stakeholders to match in demand business priorities with systems of support to implement proven strategies for talent and production.

For many manufacturing employers, a solution that has emerged is apprenticeship, specifically the gold standard Registered Apprenticeship. It's a proven system of workforce training that allows employers to "grow their own" workers, while helping employees learn the skills to be successful on the job.

One local effort to bring employers, community-based organizations, educational institutions, and workforce agencies to the table to advance apprenticeships as a solution for businesses and workers is being driven by a unique partnership between Onondaga Community College (OCC) and the Manufacturers Association of Central New York (MACNY). This summer OCC convened members of the workforce development boards of Herkimer, Madison, Oneida, and Onondaga counties, representatives from the American Apprenticeship Initiative (AAI) and local advanced manufacturing employers for an accelerator to share the process and benefits of the Apprenticeship Accelerator

Career Training Program (AACT), being piloted in Madison County this Fall.

The model is framed from the success of Vermont HITEC's machine operator registered apprenticeship program and was brought to Central New York by connections OCC made through MACNY and JFF. Its success is based on direct engagement between employers and talent through an intense strategic marketing plan, structured employee interview and assessment process, agreement from employers to establish entry level jobs and concurrently establish registered apprenticeships, and the support of local colleges and Community Business Organizations for related technical instruction.

At the accelerator, it was the cross-sector presence of Vermont HITEC's CEO, Gerry Ghazi, educators who provide the related technical instruction for apprentices in Mike Metzgar, OCC; apprenticeship sponsor support in Martha Ponge, MACNY and Jennifer McCullough, AAI; subject experts who help throughout the registration process in Nick Hanslowe, USDOL, and David Goodness, Workforce Development Institute and local employer collaboration coordinated by Ellen Bowe, Working Solutions. Unique to this effort is the engagement of candidates with little or no experience in advanced manufacturing.

"This is a pilot to increase access, to test small cohorts of apprentices at medium sized manufacturing companies," said Martha Ponge, Director of Apprenticeship with MACNY.

Since the accelerator, OCC has secured commitments from 5 employers to move forward in the process of becoming a sponsor of a registered apprenticeship program for the creation of 19 new skilled workforce positions at their companies. This success underpins the effectiveness in cross-sector collaboration with models of training that are proven effective, and create life and business transforming opportunities for communities and businesses in manufacturing.

For more information about how you can be involved in this pilot program, please contact Martha Ponge at [MPonge@macny.org](mailto:MPonge@macny.org) or Rebecca Fracchia at [r.s.fracchia@sunyocc.edu](mailto:r.s.fracchia@sunyocc.edu).

*Tyler Nakatsu is a communications manager at Jobs for the Future (JFF). He is responsible for developing strategic marketing communications plans with JFF, while serving as the lead marketing and communications specialist and liaison with SMEs working on U.S. Department of Labor manufacturing apprenticeship initiatives. Contact Tyler at [tnakatsu@jff.org](mailto:tnakatsu@jff.org) or on Twitter @post\_west.*



## Are you following along with The Next Page podcast?

Join Marisa Norcross and David Freund each Wednesday as they discuss various leadership, growth, and professional development topics.

### Frequently asked questions:

#### Where can I download the podcast?

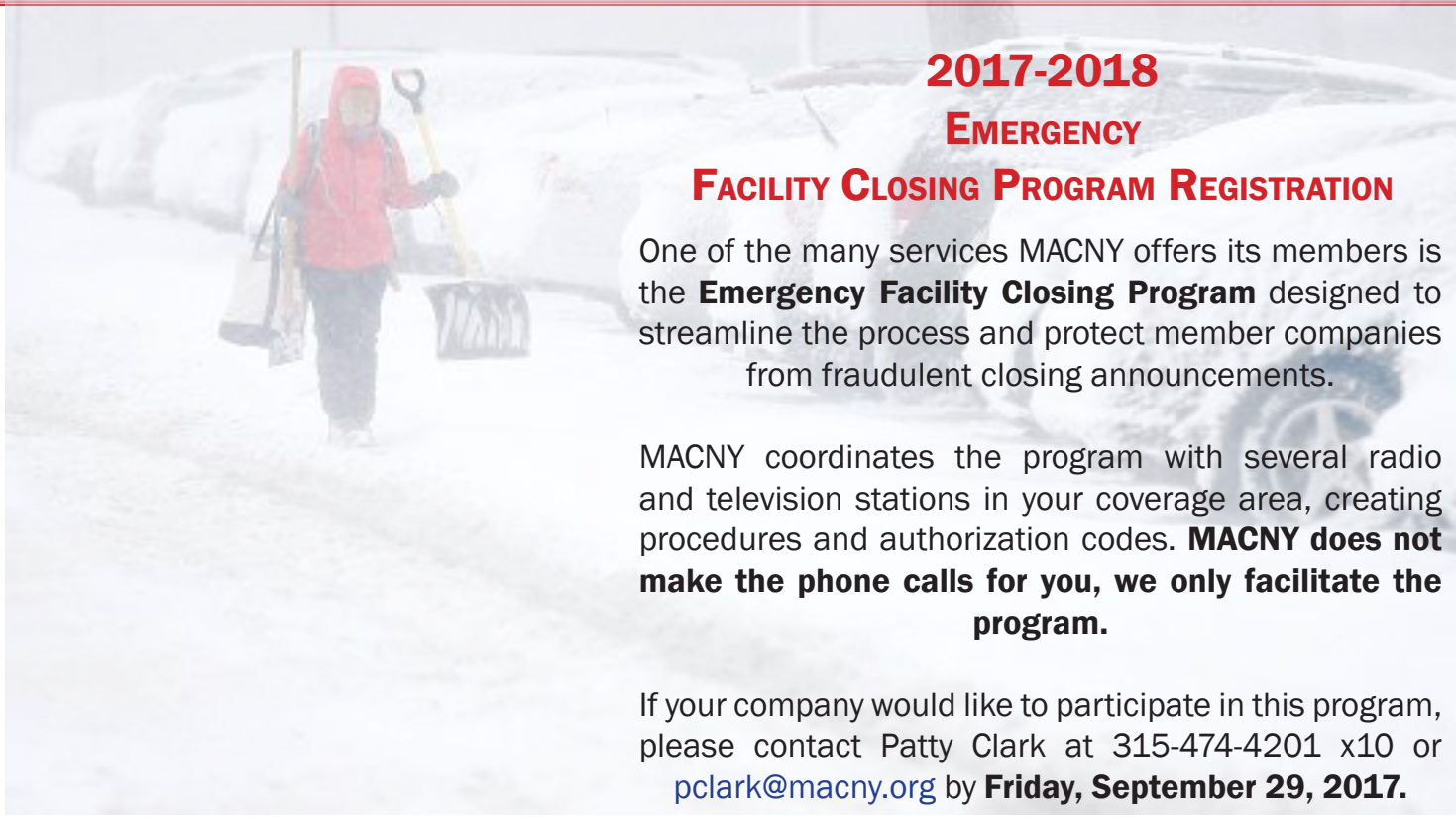
You can find The Next Page on iTunes, Apple's Podcast App, Google Play, and PodBean! You can also find weekly posts on [www.macny.org](http://www.macny.org) with the latest podcast episode information.

#### Where do you come up with the topics?

Marisa and Dave get creative with topic ideas based on recent and past experiences, but they also receive many ideas from listeners who send in comments or questions. Send your ideas to [mnorcross@macny.org](mailto:mnorcross@macny.org)!

#### Why a podcast?

Why not? Marisa and Dave wanted to provide useful content that members could easily listen to on their commutes to and from work. We're all busy, so why not utilize drive time for professional growth?

A background image for the emergency facility closing program registration notice. It shows a person wearing a red hooded jacket and dark pants, walking through a snowy area. The person is carrying a shovel and a bag. In the background, a white car is partially visible, covered in snow. The overall scene is a winter, snowy day.

## 2017-2018 EMERGENCY FACILITY CLOSING PROGRAM REGISTRATION

One of the many services MACNY offers its members is the **Emergency Facility Closing Program** designed to streamline the process and protect member companies from fraudulent closing announcements.

MACNY coordinates the program with several radio and television stations in your coverage area, creating procedures and authorization codes. **MACNY does not make the phone calls for you, we only facilitate the program.**

If your company would like to participate in this program, please contact Patty Clark at 315-474-4201 x10 or [pclark@macny.org](mailto:pclark@macny.org) by **Friday, September 29, 2017.**



John Fontanella, CPA, CCIFP  
The Bonadio Group

## Prototypes And The Research And Development Tax Credit: Good News for Manufacturers

Including the costs for prototypes in the calculation of the R&D Credit has long been a matter of contention between manufacturers and the Internal Revenue Service (IRS). However, the Courts have recently been ruling in favor of the taxpayer, leading to changes in the regulations by the IRS. This is good news for manufacturers.

### The Basics

The R&D Credit is allowed for Qualified Research, which requires compliance with a four-part test:

#### Qualified research is research...

1. With respect to which expenditures may be **treated as expenses** under IRC 174,
2. Which is undertaken for the purpose of discovering information that is **technological in nature**,
3. In which the application is intended to be useful in the development of a new or **improved business component** (product or process), and
4. Where all of the activities constitute elements of a **process of experimentation**.

#### A process of experimentation requires...

1. Identifying the **uncertainty** regarding the development or improvement of a business component that is the object of the research activities, such as uncertainty concerning the capability or the method of achieving a result, or the appropriate design of that result;
2. Identifying **one or more alternatives** intended to eliminate the uncertainty; and
3. Identifying and conducting a **process of evaluating** the alternatives, such as through modeling,

simulation, or a systematic trial-and-error methodology.

#### Costs that qualify for the R&D credit

1. W-2 wages for employees engaged in qualified research activities;
2. Supplies used in the conduct of qualified research;
3. Contracted research expenses (up to 65 percent of such costs).

#### Prototypes

So why were prototypes not allowed by the IRS as part of the R&D Credit? Because prototypes are usually sold subsequent to their use in research and development (as is; with more modifications; or parts are returned to inventory), the IRS considers a prototype to be inventory, thus not subject to the R&D Credit. However, as previously stated, Court cases favoring the taxpayer have led to new regulation.

#### Prototypes 1.174-2(a)(4) Pilot Model

The term “pilot model” means any representation or model of a product that is to be produced to evaluate and **resolve uncertainty** concerning the product during the development stage or improvement of the product. The term includes a fully-functional representation or model of the product or a component of the product. Therefore, the costs of prototype (pilot model) that qualify as section 174 costs can also be used in calculating the credit. **It is irrelevant whether a resulting prototype is ultimately sold or used in the taxpayer’s trade or business.** Subsequent events cannot reverse entitlement to the section 174 deduction and the section 41 credit.



## Example

U is engaged in the production and sale of custom machines. U contracts to design a machine to the specifications of a particular customer. U has never constructed a machine to these specifications, so there is **uncertainty** regarding the appropriate design, and uncertainty whether the customer's desired features can be designed and integrated into a functioning machine. U incurs \$10,000 of labor and material costs to produce a pilot model that is used to evaluate and **resolve the uncertainty regarding appropriate design**, and \$1,000 in using the model to **resolve the uncertainty regarding desired features**. **Now that the uncertainties have been resolved**, U incurs an additional \$20,000 to produce the finished product for sale to the customer. The \$11,000 incurred to resolve uncertainties are IRC 174 costs and are eligible for the IRC 41 credit. The \$20,000 is not eligible as IRC 174 costs, but it is costs of goods sold.

Not only can manufacturers begin taking qualifying prototype costs into their R&D Credit, but **amended returns** can be filed for any open years that qualified prototype costs were not included in the R&D Credit already claimed.

## So, How Much is The R&D Credit?

The **regular credit is 20 percent** of a taxpayers' excess of Qualified Research Expenditures (QRE) for the taxable year over their **base amount** of the QRE for the credit year. A **reduced credit of 13 percent** of excess QRE is available.

Rather than the regular credit, a taxpayer may elect to use the **Alternative Simplified Credit (ASC)**, which can be elected by a taxpayer to compute the credit. **The credit is usually 6 percent of the current year QRE**. This option would greatly reduce the credit that would otherwise have been calculated under the regular method, but the advantage of this method is that it **does not require substantiation of the fixed-base years' research activities, i.e., it is much simpler**.

## Offset Against AMT

For tax years beginning in 2016, an **Eligible Small Business** can offset newly generated R&D Credits against AMT liability.

An eligible small business is:

- A corporation whose stock is not publicly traded;
- A partnership, or
- A sole proprietorship.

Note: The average gross receipts of which for the three-tax-year period preceding the tax year of the credit cannot exceed \$50 million.

## Payroll Tax Credit Election

The payroll tax credit election is an annual election made by a **Qualified Small Business** to apply the R&D Credit against the employer portion of social security taxes.

## In Summary

The R&D Credit can provide much needed working capital in the form of reduced income taxes. The need to innovate is inherent in manufacturing. Competition requires new products and new processes. As such, manufacturers often do research and development on a regular basis, but the R&D Credit can be overlooked.

Contact John Fontanella, CPS, CCIFP ([jfontanella@bonadio.com](mailto:jfontanella@bonadio.com)) for the professional assistance needed to claim this lucrative tax credit.

*John M. Fontanella, CPA, CCIFP, is a principal in Bonadio's Syracuse office. He has more than 30 years of experience offering technical advisory services in taxation and financial negotiations. John's experience includes federal, multi-state and international income taxes, specializing in tax planning for manufacturers. He is an expert in sales tax, advising manufacturers, contractors, engineers, and dealerships, including public and international companies. He is a member of the Contractors Financial Managers Association and Associated Building Contractors.*

## Julianne Pease Joins MACNY as Membership Coordinator



MACNY is pleased to announce that Julianne Pease has joined the MACNY staff as Membership Coordinator. She will be a tremendous asset to both the team and members.

Cindy Nave, MACNY's Chief Operating Officer, adds *"I am so excited to have Julianne on our team. Her experience in relationship building and event coordination coupled with her attention to detail will bring great value to our team and our members."*

Julianne is experienced at both working for non-profit organizations and with non-profit organizations from her time with the March of Dimes in Syracuse, Beneficial Bank in Philadelphia, and Cradles to Crayons in Conshohocken, PA.

Julianne has her Bachelor of Science degree in Management and Marketing as well as her Master of Business Administration degree from Philadelphia University.

Please join us in welcoming Julianne to the team! She can be reached at [jpease@macny.org](mailto:jpease@macny.org).



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# Month at a glance... **SEPTEMBER**

- 4 MACNY & PEB Offices Closed for Labor Day**
- 8 “The 21 Irrefutable Laws of Leadership” Mastermind Group (Individual Members Only)**  
For more information, contact Marisa Norcross at [mnorcross@macny.org](mailto:mnorcross@macny.org)
- 10 Lean-Six Sigma Green Belt Program Online**  
Time/location: Online; Cost: \$1,840 per MACNY Member / \$2,000 per non-MACNY Member;  
Facilitator: Syracuse University / The TCM Group
- 10 Lean-Six Sigma Black Belt Program Online**  
Time/location: Online; Cost: \$3,680 per MACNY Member / \$4,000 per non-MACNY Member;  
Facilitator: Syracuse University / The TCM Group
- 13 MACNY Employee Benefits Marketplace Webinar**  
Time: 10 - 11 AM; Location: At your desk via webinar; No cost
- 14 Maximize Your MACNY Membership**  
Time: 9 - 10 AM; No cost
- 15 Project Management**  
Time: 8:30 AM - 4:30 PM; Cost: \$350 per MACNY Member (\$315 per Individual Member) / \$550 per non-MACNY Member; Facilitator: Patrick Penfield, Syracuse University
- 19 HR Breakfast Briefing – Documenting Employment Relationships**  
Time: 8 AM - 10 AM; Cost: \$25 per MACNY Member / \$35 per non-MACNY Member; Presenters: Alyssa Campbell and Peter Jones , Attorney with Bond, Schoeneck & King, PLLC
- 19 Annual Council Kickoff at Empire Farm Brewery**  
Time: 4:30 PM - 7:30 PM; Location: Empire Farm Brewery, Cazenovia, NY; Cost: \$60 per member
- 21 Lean Overview**  
Time: 8:30 AM - 12:30 PM; Cost: \$250 per MACNY Member (\$225 per Individual Member) / \$450 per non-MACNY Member; Facilitator: Cindy Oehmigen, Director of Energy and Corporate Services at MACNY
- 21 Plant Engineers Council: Tour of Sunoco’s 1886 Malt House**  
Time: 4 PM, dinner to follow; Location: 376 Owens Road, Fulton; Cost: \$25 per Plant Engineers Council Member & Individual Member / \$65 per non-Plant Engineers Council Member
- 26 Making Today Matter**  
Time: 8:30 AM - 10:30 AM; Cost: \$99 per MACNY Member (\$89 per Individual Member) / \$195 per non-MACNY Member; Facilitator: David Freund, Chief Leadership Officer, MACNY
- 29 Industry 4.0 Digital Marketing**  
Time: 8 AM - 10 AM; No Cost; Facilitated by Advance Media New York

**Unless otherwise noted, all events and classes are held at MACNY Headquarters,  
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*The information provided herein is general in nature and is designed to serve as a guide to understanding. If the reader has a specific need or problem, the services of legal counsel should be sought to address the particular situation. Non-profit bulk rate postage is paid at Syracuse, NY.*