

AutoGen is providing Optimal Workflows for Automated Nucleic Acid Extractions for Biorepositories, CROs, Academic Research and Clinical Diagnostic Laboratories, Pharmaceutical Companies and Governments Worldwide



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“At AutoGen, we know that each and every sample is important, and at the end of the day we will do whatever it takes to provide workflow solutions that will make a difference in extraction processes.” - Michael Messier

CEOCFO: *Mr. Messier, what is the focus for AutoGen, today?*

Mr. Messier: AutoGen’s primary focus is to provide optimal workflows for automated nucleic acid extractions with an unmatched level of customer support and service. Our customers include biorepositories, contract research organizations, academic research laboratories, pharmaceutical companies, clinical diagnostic laboratories, and government institutions all over the world.

CEOCFO: *What are some of the challenges specific to DNA and RNA extractions with regards to workflow?*

Mr. Messier: One of the key challenges our customers face is automating a diverse set of workflows. Often, labs can’t fit into a one size fits all approach. AutoGen brings a diverse set of workflows enabling us to customize our proposal based on each client’s specific set of needs. Add into that some key automating advantages that we have in our wheelhouse allowing us to offer some really exciting solutions to a wide breadth of challenges in our customers’ labs. AutoGen has been automating workflows as far back as “The Human Genome Project” and we are constantly working with our customer base to bring them solutions that improve efficiency and reduce costs within their nucleic acid extraction processes.

CEOCFO: *Would you give us a couple of examples of what the challenges are and how AutoGen can help?*

Mr. Messier: Approximately two decades ago, our customers began biobanking for long-term storage of DNA samples originating from vacutainers of blood. The challenge AutoGen faced was providing a workflow solution that not only would extract DNA from 5 – 10 ml of whole blood, but provide DNA of the highest quality suitable for long term storage for use in multiple downstream applications. Our solution was to develop the first large volume DNA automated workflow that eventually evolved into our current FlexSTAR+ platform. The FlexSTAR+ automates large volume whole blood DNA extraction from primary sample tubes to final DNA storage tubes ready for long-term storage. Another key area is a growing workflow around tissue and liquid biopsies. As cancer research continues to evolve, physicians are able to learn critical pieces of information about patients to both develop and monitor a treatment plan. One of these samples involves tissue embedded in a wax paraffin. This sample type is challenging to work with and requires very caustic chemicals that are dangerous. We've been able to launch a workflow that completely automates this isolation and frees a lab technician up for other important tasks. An automated and caustic chemical free FFPE workflow is something we are excited to provide to our customer base.

CEOCFO: *What is it that you are able to do? Why are you able to do that when others are not?*

Mr. Messier: It is our mission to provide best-in-class solutions for automated nucleic acid isolation with an unwavering and unmatched level of support. Our commitment to continual development and technical knowledge, in addition to continual advancement research in the industry, provides our team members with the know-how and skills to support all aspects of workflow solutions and chemistries for our customers. What sets AutoGen apart is quite simple: we are small, agile, accessible and do whatever it takes. Our customers have direct access to everyone on the AutoGen team, and as a privately held business we are able to react quickly to and provide expedited solutions. Customers have our guarantee that no one in the industry will work harder to ensure their satisfaction. In other words, we are walking the walk in all that we do.

CEOCFO: *What other things might someone be looking for that you are able to provide?*

Mr. Messier: I think it is important to highlight the size of AutoGen and because of this, we are able to be extremely responsive to both current and prospective customer needs. I'm able to deploy our resources in a very nimble way. As we see a trend develop, we can focus on it. At the same time, we customize our business and our workflows as new challenges are presented to us by our customers. It's a lot of fun, and it's not something that our customers see from other vendors.

In addition to providing instrumentation, reagent kits, and service to support our DNA and RNA workflows, we often times will fill niche needs that our customers need assistance with. We have run DNA extraction as a service for several of our customers. For another customer, we stored a large extraction system in our facility for several months while they were relocating their lab. We've been fortunate to develop long-

standing relationships with our customers, and our team does whatever it takes to get the job done successfully.

CEO CFO: How does AutoGen compare with the many gene testing companies providing services today?

Mr. Messier: There certainly have been a large number of Direct-to-Consumer genetic testing labs that have started up over the last several years. These labs use DNA analysis to allow consumers to obtain genetic and familial information. Generally, the DNA that is analyzed originates from saliva. Before the DNA can be analyzed it must be extracted from the saliva sample. This is where our workflows come into play to do the extraction work. This type of work done by gene testing companies isn't just for human samples. We have several customers using our workflows for DNA analysis on pets for screening on DNA breed identification, traits, ancestry and genetic disease risk.

CEO CFO: When customers turn to you, do they know what they are looking for? Are people aware of the range of products and some of the innovative products or do you need to help people to figure out the best way to get the results they require?

Mr. Messier: It is a little bit of both. Labs know their processes and goals. For example, they may want to go from a manual methodology to an automated methodology, but they might not know precisely how to get there. We spend time learning about their organization and goals and provide solutions that are a perfect fit for their laboratory workflow needs and budget. With a lab making a significant investment in capital equipment, this process certainly doesn't happen overnight. The lead time typically is between six months to two years of engagement education. I feel this is one of our core strengths and sets us apart. We make sure that our customers are well informed throughout the entire process from start to finish. After the installation, our work still continues as we are committed to providing unsurpassed, lifetime support before and after the sale.

CEO CFO: In the industry is the feeling that automation would be more precise or, from the other side, that not having a person do it might miss something? How does that balance come into play?

Mr. Messier: What you typically see here is a balancing act. You're dealing with a sample type (DNA/RNA) that you really can't see with the naked eye. This sample is also difficult to collect, i.e., requires a blood draw and a patient to physically be at the hospital, and many other factors. Getting that sample can be challenging and extremely cost-prohibitive. What does that mean? You're dealing with a precious sample that required effort to obtain. Unlike a person, instrumentation never shows up overtired and is extremely reproducible. In a diagnostic environment, labs are looking to automate as much as they possibly can to increase throughput, reduce costs, and improve efficiency/accuracy. The tradeoff, of course, is the capital investment, funding and and/or, budget cycles to do so. Our job is to help these labs balance all of that by identifying a solution that is perhaps a modular approach and can be

expanded upon over time or fits into the current available budget. Of course, all while keeping in mind how the lab will evolve.

CEO CFO: What is your geographic reach today?

Mr. Messier: AutoGen's customer base is international, with installations in North America, Europe, the Middle East and Asia. At the moment, we are looking at additional opportunities in South America as well.

CEO CFO: Why South America?

Mr. Messier: South America has a large population in excess of 400 million that has been underserved in the area of nucleic acid research for a number of years. We believe that a healthy economy and desire to work towards personalized medicine will enhance the DNA extraction market, particularly in San Paulo and Buenos Aires.

CEO CFO: How do you get the attention when you are at a conference with so many new ideas, or does your reputation precede you?

Mr. Messier: Each conference is unique, and we employ different approaches depending on the event. For example, we recently participated at the AACC Annual meeting, where we launched our newest instrument the XTRACT 16+. Not being biased, but the XTRACT 16+ is a terrific looking instrument, and it was the focal point of our exhibit space and drew quite a bit of attention. At other events, we may not even have instrumentation on-site. This was the case at ASHG last year. Our space was set up like a living room, and we used our time to catch-up and visit with our customers.

CEO CFO: How do you match the corporate idea to what you personally think? Such as when it might make sense to look at an upgrade, when there is some new idea that did not start with you but that you might incorporate. How do you evaluate what you do as you go forward?

Mr. Messier: We've faced this scenario on a few occasions. An example of this occurred about 18 months ago. One of our larger customers came to us as said "We love the FlexSTAR+ but we need it to be even faster so we can process more samples during the day." Always up to the challenge, we gathered our team of engineers to break down the protocol and evaluate what could make the processing faster. The team became laser focused on one of the mechanical moving parts and altered the way it was mixing the samples. The outcome was a new module that increased speed and solved the problem and decreased processing time by thirty-five percent. This situation is representative of meeting a challenge head-on and finding a solution. As a result, we are now incorporating this module in the FlexSTAR+ for all customers – present and future – so everyone benefits.

CEO CFO: What is your focus as CEO? How do you spend your time?

Mr. Messier: I have always believed that as a leader of an organization the size of AutoGen, you need to be strategic and hands-on at the same time. This is not always easy to do. It is a balance of being the chief problem solver on a day to day basis, as well as making sure all the little things are being addressed. You are dealing with issues of the moment, as well as thinking about what might hold in terms of new technologies, workflow, and new geographic territories to explore or marketing activities to implement. I am fortunate to have an amazing and dedicated team, and I try to support all of my department heads as best as I can so they can work through and solve issues as they arise. You never know what the next day is going to bring until there is an email or a phone call that totally changes your direction. That is what is fantastic about small business!

CEOCFO: Would you tell us about the consumable kits? What part do they play in the overall business flow?

Mr. Messier: We talk about workflows all the time. Essentially, the workflow is everything that goes into the process of starting with sample material and ending up with DNA or RNA at the end. The process would include the instrumentation, the consumables that run through the instrument, and then our ongoing mechanical and technical support service. It is all part of the whole package. The consumable kits are the various types of chemistry which gets the DNA or RNA out of the sample being processed. We have three different types of kits, each making use of a different methodology. For our large volume workflows, we use a precipitation based chemistry. In fact, we are the only company that offers automated precipitation-based workflows (which includes the highest molecular weight available) backed by 16 years of stability data. For our low to medium throughput workflows, we employ membrane and magnetic bead systems.

CEOCFO: What surprised you as AutoGen has grown and evolved to where you are today?

Mr. Messier: Maybe how fun it is and how great it is to have an organization where everyone is supportive and pulling ropes in the same direction. As you evolve through your career, you have a job, and you go to your job every day and you work hard and do all of that. However, this is so much fun! It is so much bigger and better than that! We are making a difference at AutoGen! Our customers are doing amazing things in their labs that benefit so many. It puts a smile on my face that we are part of that process in making the world a better place.

CEOCFO: How do you know, when you bring somebody on, that they understand, not just the science part, but the passion part of what you do at AutoGen?

Mr. Messier: We preach it! We let our applicants know that this is what we are all about. However, at the end of the day it is really all about the individual. We can teach all of the nuances of our workflows, but it is ultimately ability and positive approach that makes our employees special. Someone either possesses those traits or they don't. If you are willing to work hard, are a team player and have the wherewithal to go that extra mile, we will teach you everything else about the business.

CEO CFO: Why is AutoGen an important company?

Mr. Messier: At AutoGen, we work with an unwavering focus to provide the support required both before and after the utilization of our products and never lose sight that every sample has a life that depends on it. As noted earlier, our customers are involved with projects that ultimately benefit so many. For example, we recently installed a new system at a clinic in Lancaster, Pennsylvania. This clinic is a trusted medical home for families working to prevent and treat genetic illness in their children and serves predominantly Amish and Mennonite families. The difference that this clinic is making is special, and it makes us proud that our workflows assist in making life better for the community that they support. At AutoGen, we know that each and every sample is important, and at the end of the day we will do whatever it takes to provide workflow solutions that will make a difference in extraction processes.

