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THE LIFE SCIENCES VOICE The Georgia Bio Industry E-Newsletter

Newsletter Issue: April 2018

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Letter from the President



Our 2018 industry impact initiatives are now well underway to deliver meaningful support and growth to Georgia's life sciences industry.

Our focus on workforce development kicks into high gear this quarter with our first <u>Bioscience and Health IT Career Fair</u>, followed by our <u>4th Annual Swings Fore STEM golf outing</u> to support the <u>Georgia BioEd Institute</u>.

We finished the 2018 legislative session with a continually expanding Policy & Advocacy Committee represented by Cornerstone Capitol Strategies. This month we also will begin developing strategies for promotion of new industry-specific incentives and tax policy, along with support for our high school STEM initiatives.

Much of our work this year centers around the support and resources we provide to our members. Our new website and member management system launches in April, so keep an eye out for instructions on how to

use this system to engage with the Georgia Bio staff and fellow members.

We're also developing the <u>2018 Georgia Bioscience State of the Industry Report</u>, with a planned rollout at this year's Summit in October. This report will also serve as a resource guide and company directory, providing tremendous value for your prospective employees to better understand the strength of Georgia's life science industry. <u>Sponsors of this report</u> receive customized versions to further enhance this value for recruitment efforts.

<u>Let us know</u> how we can help you and how you'd like to get involved with Georgia Bio initiatives. And remember to join us at <u>upcoming events</u> and our monthly <u>member orientation webinars</u> to learn how to maximize your membership benefits and value.

Thank you,

Russell Allen President & CEO





Cobb Galleria | Atlanta, Georgia

georgiabiosummit.org

ELN Executive Interview Series: Kirk Barnes, ATDC, Startup Catalyst

Ishaneka Williams, MBA



Kirk Barnes leads the HealthCare Technology Vertical as a Start-Up Catalyst at the Advanced Technology Development Center (ATDC), housed Georgia Tech's campus in tech square. His life background sciences and experiences within the pharmaceutical.

biotechnology, nanotechnology, diagnostic, and medical device industries across various areas of expertise include: sales, business development, marketing, training and leadership, lobbying, and managed markets.

Most recently, Kirk leads business development for TransPharMed, a consulting group focused on advancing sales solutions in the life sciences. Additionally, Kirk has served in various positions of increasing responsibility at these pharma/biotech sector companies: Inventiv Health, Zogenix, Takeda, Janssen Biotech, and Pfizer.

Kirk also led lobbying initiatives in both the United States and European Union to incorporate nanotechnology-based solutions in healthcare legislation related to the EU Falsified Medicines Directive, US e-Pedigree, and US FDA REMS.

Kirk served as a Board Member of the International Authentication Association (IAA), which monitored and provided guidance regarding authentication techniques and counterfeiting trends across the world. He holds a bachelor's degree in Business Economics from Florida A&M University.

What are some of the memorable opportunities, successes and/or challenges that occurred along your career and leadership path?

My career path is non-traditional. I finished FAMU (Florida Agricultural & Mechanical Univeristy) in Economics and went into pharmaceutical sales. I was promoted into various roles of management, leading me directly from the consumer side to biotechnology – focusing on data and decision making, demonstrating that your entry point does not determine your career path. Through my relationship with my mentor, I joined a well-established company based in Japan who was launching operations in the United States. This startup experience led to one of my Senior VP's recommending me to another startup based out of Northwestern driving global business development in the nanotechnology space.

Supporting startups, particularly in the global respect, provided deep insights into regulatory landscapes and necessitated a deep understanding of navigating environments to enter marketplaces by speaking to the added value of new technologies to consumers. I had the ability to educate lawmakers and political/governing bodies eventually as a lobbyist (in the United States and Europe) to put nanotechnology in a favorable lightworking with legislation didn't want it to be excluded from healthcare solutions.

Considering the TransPacific Partnership, and its transformative implications on global particularly on the global footprint of healthcare, how did it influence your work as a lobbyist? Whenever you're working across borders, concerns regarding regulations and counterfeiting are paramount. As a board member for one firm, I would advise law enforcement and drug investigation entities on how technology can help with diversion. Cross-border and global dealings led me to consult for Austria; lending my expertise in anticounterfeiting solutions market assessment analysis and doing business within the U.S. With the transpacific partnership, certain parts are going to necessitate global business: partnerships with industry, law enforcement, technology - international scene must manage to counterfeit industry.

ATDC is making active moves within the space of technology specific organizations. How did this influence its work? Is there anything you would like to highlight regarding ATDC's path in bringing resources to its beneficiaries?

ATDC is positioned as a Hub, housing multiple resources. Our portfolio of companies has a free 1-year membership to GaBio.

Most start-ups need coaching, financial support, and corporate connections. ATDC offers curriculum as part of the business coaching - giving access to startups outside of their wheelhouse where our CMO can help them use these newly developed strategies to point in right direction. The STTR/SBIR trainings help those with academic or business interests pursue unique funding opportunities, another offering from ATDC to provide an avenue in getting the business off the ground and running - eliminating the mysteries of which grants are applicable.

ATDC also benefits its capital partners where angel investors, venture capitalists, and corporations have access to gain intimate insight and a competitive advantage in terms of the new technologies on the cutting floor.



One major highlight:

The Department of Health and Human Services has an Innovation Roadshow in which it selects 10 cities across the U.S. geared to helping start-ups interact with the government. Atlanta has been selected as one of the 10 cities for 2018, September 11-12th!

ATDC discovered this opportunity through meeting the point person while attending a conference. Atlanta being chosen can lead to major opportunities for the State of Georgia with ATDC hosting DHHS:

- 1. Global picture for establishing Atlanta and Georgia as the hub of innovation in Southeastern United States.
- 2. Largest vertical within ATDC is health tech over 20% of the companies are in this area giving opportunities for more growth.
- 3. Successful leverage access and gain depth of insight in terms of receiving information on how to do business with the largest payer in the country and the associated policy and reimbursement details for the U.S.
- 4. Lastly, we can showcase our integrated partnerships with academic institutions, GaBio, the Chamber and those all working together and not in silos.

What opportunities do you see for Georgia Bio and the life sciences industry locally?

Georgia, going forward, has had a significant amount of movement in global organizations collaborating and leading health science and tech-innovation in the southeast portion of the U.S. The movement in molecules coming out of academia shows how we can bring things to market earlier. Likewise, the digi-healthcare space at Georgia Tech demonstrates the success for not only Georgia, but the U.S. and potentially the world.

Would you like to share any advice to young professionals who are early in their career, or to those with interest in industry as an entrepreneur?

The most important thing is the ability to network and the intentionality in terms of where you want to go, and your follow-up. I have never had to use the traditional measures to gain employment. I have always received a call [from mentors and/or professional contact] which would lead to a business or a job opportunity. It's important to develop a track record of doing great work, such as:

- 1. Intentional about helping others be sincere, and if you offer to help people, help them!
- 2. Take effort. You have to get out of your own space. Consider how you meet people and be intentional in networking with those who can help you with those areas in which you don't have all the competencies.
- 3. Develop strategy and an elevator pitch practice answering the "what you do or want to do" questions. Convey what you're doing and where you're going. Invite a discussion it helps people to learn more about others. Eliminate the default answer, talk about your focus and what you're exploring. These things are applicable to you if you are a recent graduate, changing careers or launching a business.

Lessons from Georgia Biotech- International Fulbright Student Experiences

Joshua Renfroe, MS, MPH, GSU Robin Nguyen, GSU



The Fulbright Foreign Student program offers opportunities for students from more than 140 countries to pursue research and higher education United States. Grants are funded by the United Department of State's Bureau of Educational and Cultural Affairs and enable ambitious international students to study in the US and

earn their degree with intent to return to their country with new skills and perspectives. One industry that is rapidly changing and benefits from new education and cultural exchange is the biotech industry. We discussed with three Fulbright students in Applied and Environmental Microbiology at Georgia State University their experience with cultural exchange and how it relates to their focus in biotech.



Etna Castelblanco, a Fulbright student from Colombia, worked at SENA (Servicio Nacional de Aprendizaje - National Learning Service). SENA is a government institution in Bogota, Colombia that supports the country's emerging biotech industry through educational programs and collaborative research projects. Etna was involved in enzyme research from environmental microorganisms for biotech applications. When she discovered Dr. George Pierce's lab's focus on enzymes and biotechnology, she was excited and targeted institution

mentors to help arrange for placement. This research and experience is supporting her larger plan to help develop her country's industry and sees opportunity with local groups such as GaBio as a part of this effort. One of the takeaways from her research lab and association with GaBio is the focus on the team aspect of projects and the benefit of gathering like-minded individuals to focus on priority issues.

"The atmosphere in the lab provides a contrast between independence and strong peer mentorship, allowing for students to come up with innovative solutions, solve problems, and help others solve problems," Etna mentions. This style of learning and collaborating in the lab and among organizations is a cultural characteristic that she hopes to replicate upon initiating projects and collaborations in Colombia, and looks forward to participating in GaBio events over the next year as she prepares for her transition back into her local industry.



Yathreb Mohamed, from Cairo, Egypt, is in her first year in the Biology Masters program in Dr. George Pierce's lab and is working on development of scalable gingivitis vaccine characterization using a flagellin-based platform. Her undergraduate degree was in clinical pharmacology, and she continued working as an assistant in a pharmacology lab. Her focus and interests have since shifted to policy and management, where she developed leadership skills in Egypt's prestigious Presidential Leadership Program, earning a scholarship and gaining exposure to political development activities and diplomacy in the region. Her exposure to biotech industry in Egypt has been limited, Yathreb explains, because most research and development activities are in Europe and private companies are involved in manufacture and advertisement only. Her professional goals through the Fulbright program and GaBio are to gain technical and soft skills in management and leadership. When she returns to Egypt, her goal is to continue working in health-related areas, particularly in advancing opportunities to expand research and development related to manufacturing in Egypt. Yathreb comments that her exposure to leadership structure and style will be her goal for the remaining year in the program and looks forward to visiting facilities through the GaBio industry tours and gain greater exposure to leadership styles in biotech here in the U.S.



Raghda Fathi, a Fulbright student also from Cairo Egypt, is near completion in her Masters program with Dr. Eric Gilbert of Applied and Environmental Microbiology at Georgia State University. Her previous role in Egypt was as a Microbiologist in a government institute assessing sterility and quality control of drugs. Her current research is in treatment of biofilms and understanding their involvement in antibiotic resistance on medical devices. Biofilms can be problematic and contribute to the overuse of antibiotics and devices can carry MRSA Stapholococcus aureus, leading to poor hospital outcomes. Raghda will soon be returning to Egypt, but she mentions she has gained tremendously throughout her program here. She will return to her government institute to assess drug quality in Egypt, but molecular techniques are sparsely used there, due to lack of training and therefore make it challenging to bring in equipment and support long-term maintenance and training. Her use of molecular techniques in Dr. Gilbert's lab will help her to advocate for better equipment and train researchers in use. Before returning to Egypt this year, Raghda plans to visit local facilities through the GaBio industry tours.

Historic Regenerative Medicine Workshop Wraps Up

Jerry Grillo, Georgia Tech

One era ends as another one begins for the annual international gathering of leading regenerative medicine researchers. This year marked the beginning of one era and the end of another for the Regenerative Medicine Workshop, which wrapped up its 22nd edition in March. For the first time, the workshop was held somewhere other than Hilton Head.

This year, more than 200 engineers, scientists, clinicians, and industry partners from across the globe gathered for the first time at Wild Dunes on Isle of Palms, just north of Charleston. This year, Bob Guldberg presided over the workshop for the last time, at least for the foreseeable future. Cont. on next page



Guldberg, executive director of the Petit Institute for Bioengineering and Bioscience at the Georgia Institute of Technology (the organizing body that launched the workshop in 1997), will begin a new post as vice president and the inaugural director of the Knight Campus for Accelerating Scientific Impact at the University of Oregon in August.

"Each year I wonder how we can possibly top the previous year's workshop," says Guldberg, winner of this year's GaBio Industry Growth Award at the Awards Dinner, "But this one was special. I've been coming to the Regenerative Medicine Workshop since it started. So this has not only been a place to showcase cutting edge research in regenerative medicine through the years. It's been a community for me and my family. But I'm excited for the future of the workshop in a new location, and look forward to coming back as a participant in coming years."

In fact, while other hands will guide the event next year, Guldberg is still expected to participate, states Bob Nerem, founding director of the Petit Institute, who recruited Guldberg to Georgia Tech more than 20 years ago.

"Bob, let me assure you that even though you're leaving Georgia Tech, and even though you're not affiliated with the organizing partners of this workshop – you're way out there in Oregon – we still expect to get work out of you," Nerem quipped to a jovial crowded room during the last conference dinner. He then added, "so, Bob, from your friends, thank you for all you've done, and for your leadership in moving this workshop forward."

This year's workshop, branded 'Synergizing Science, Engineering, and Clinical Translation,' drew representatives and researchers (principal investigators, postdocs, and students) from more than two dozen universities and other institutions, including the organizing partners: the Regenerative Engineering and Medicine (REM) research center (a partnership of Georgia Tech, Emory University, and the University of Georgia), the Stem Cell and Regenerative Medicine Center at the University of Wisconsin-Madison, the Mayo Clinic's Center for Regenerative Medicine as well as its Rehabilitation Medicine Research Center, and the McGowan Institute for Regenerative Medicine at the University of Pittsburgh.

Other partners/sponsors included the Advanced Regenerative Manufacturing Institute (ARMI), Biofabusa, MiMedx, WiCell, Biological Industries USA, ACell, and BioSpherix, Ltd.

Beginning on March 21, with a series of late afternoon presentations, the Sweetgrass Pavilion Conference Center at Wild Dunes was packed hour after hour over the next several days for keynote presentations, as well as other research, including rapid fire sessions for students and other trainees. The highlight on Thursday was a poster session and competition for trainees, won by Georgia Tech postdoc Woojin Han (who is co-advised by Petit Institute researchers Andrés J. García and Young Jang).

An annual highlight of the workshop has always been the Nerem Lecture, an hour long presentation by one of the world's thought leaders in a particular field. This year it was delivered by Viola Vogel, professor and chair of the Department of Health Science and Technology and principal investigator of the Laboratory of Applied Mechanobiology at the ETH Zürich, Switzerland.

Her presentation was entitled, "Unraveling the Secrets of How the Mechanobiology of Extracellular Matrix Regulates Cell and Tissue Functions," but she devoted a portion of her talk broadly to the origins of the field of bioengineering itself. Coming from a background in physics, Vogel leapt into bioengineering in 1990 at the University of Washington, where she became founding director of the Center for Nanotechnology before moving to Switzerland in 2004.

Quoting something Nerem said years ago, Vogel stressed, "how important it is for people to move from different disciplines into this field of bioengineering."

Early on, as bioengineering was maturing from its infancy, she noted that engineers had a difficult time understanding, "the biology, the physiology, so they didn't always pick the right questions to pursue. But I think what we're seeing now is a younger generation that was educated with two backgrounds, the science and the engineering, and you're seeing it in the presentations, in how they pick which problems to address, in how they package what they are doing, and that is absolutely crucial for this field to advance."

There were 50 research presentations over the four-day workshop, including a wide range shared by this new generation of biomedical researchers. The talks covered such timely topics as immunotherapies, cell manufacturing, engineered hydrogels, DNA barcoding, and organoid model systems and many others.

So once again, it was a lot of deep diving along the Atlantic coast, into regenerative strategies to improve the human condition. And Guldberg, for one, came from the workshop encouraged and energized.

Cont. on next page

"The field of regenerative medicine is moving so rapidly both in terms of the science and progress towards therapies that are having a remarkable impact on patients with cancer, degenerative conditions, and traumatic injuries," Guldberg says. "I love this workshop and look forward to continuing to come each year, because it is the premier meeting to hear the latest progress in regenerative medicine."

2017-2018 Flu Season Reflections and Future Directions

Bijean Ford

As most of us are aware, this year's flu season has been nothing to sneeze at (pardon the pun). Even with the widespread campaign from the CDC and other healthcare entities to get vaccinated, we are experiencing one of the worst flu seasons in almost a decade, with nearly 25,000 hospitalizations and 119 pediatric deaths. Typically, peak flu season is from December into early March, so the worst of the season may be finally behind us, further supported by a welcome recent report of a decrease in flurelated hospitalizations. Are most of these hospitalized individuals part of the "naughty cohort" that opted to not receive the vaccine? Not necessarily, as many of those who have received the vaccine are still falling ill; it is reported that efficacy against the predominant flu strain wreaking the most havoc here and abroad is as low as 10%. This may seem like a win for the "see, that's why I don't get the flu shot" crowd, but not so fast! Let's take a look into some of the basics about what the flu vaccine is and how it works, what may have happened to contribute to such an underperforming vaccine this season, and discuss some of the reasons for the hesitance and resistance against receiving the flu vaccine.

There is a misconception that the flu shot protects against "one flu virus" and if the efficacy is not up to par, like this year, then the scientists plain and simply got it wrong. However, the vaccine is more complex than that. Apart from the viral antigens, the vaccine contains preservatives and adjuvants (stimulants for the immune system) like formaldehyde, aluminum salts, gelatin, thimerosal, chicken egg proteins, and antibiotics. Sitting down with Susanne Linderman, a post-doc at Emory University who has done plenty of work on flu explained that the flu shot for this season is a quadrivalent vaccine, meaning that it contains protection against 4 different strains of flu (2 A strains and 2 B strains). These strains were chosen based on the data acquired from surveillance centers around the world that monitor which strains are most rampant and leading to hospitalizations. Scientists then convene, discuss and debate which strains should be accounted for in the next flu season's vaccine, which can be hit or miss. "Bio-mathematicians also use very different methods to predict strains for the vaccine", remarked Susanne, "which utilize higher level computations." However, this season predicting the correct strains was not the primary issue. On average, using a well-matched flu vaccine, lends itself to an efficacy between 40 and 60 percent. The vaccine this year confers this level of protection against 3 out of the 4 strains, however, the most troublesome strain, H3N2, appears to be infecting people as though it was never selected for in the vaccine. How could that be?

According to a couple highly reputable officials from the CDC and the FDA, the vaccine deficiency may stem from what is considered an "antigenic drift" or small mutation in the virus that occurs during propagation of the viral antigens that go into the vaccine. This mutation alters the external composition of the virus, which is what your immune system will recognize if the pathogen enters your body. Dr. Daniel Jernigan, a CDC expert on the flu virus, visited Emory University Hospital and gave a short talk in open town hall format, updating the public on the flu season statistics. There, he explained possible reasons for why this particular H3N2 strain is running rampant and undeterred, mentioning that propagation in fertilized chicken eggs may be to blame. Apparently, the virus that is propagated and harvested from the eggs is not the same as what they initially put in, due to the virus adapting to the egg environment, in which it grows. As a result of the mutation, the virus acquired a glycosylated site, which Susi made analogous to two pieces of Velcro, with one piece clogged by lint; the two pieces can't attach! This is very similar to what happens between antibodies that normally would recognize a particular site on a virus, and what happens after that particular site becomes concealed by the glycosylation. The antibody is unable to recognize the site, and as a result never binds to the virus to signal other immune cells.



Using chicken eggs has been the traditional way of general vaccine propagation, but unfortunately this may be resulting in recipients receiving a strain of virus in the administered vaccine that differs from the circulating strain, which is no good. One alternative to the eggrelated issue is to make 100% of the vaccine by using

cultured cell lines that allow viral replication. Currently about 15% of flu vaccines are made this way, primarily for individuals with egg allergies, so it's not a new feat. However, some of the pushback to pursuing this route is the expense of big pharma having to overhaul the vaccine propagation procedure from eggs to cell culture. On the bright side, there is a <u>report</u> that the cell-based vaccine may be more efficacious, perhaps by 20%, in providing protection. So at the end of the day, these companies are faced with a dilemma of how to protect their financial prowess while overhauling their current standard operating procedures to become more efficacious.

Another possibility for the H3N2 virus strain not working in the vaccine may be attributed to a concept deemed "original antigenic sin". For example, if you are exposed to different varieties of a specific strain of virus, instead of your immune system creating new antibodies to recognize the new portions of the viral construct, it recalls an antibody response to the conserved portions of the virus that your body recognized on the original strain you were exposed to, probably as a child. This means your body never adapts to the new versions of that strain of virus and you get sick over and over again, like it's the first time. One particular study has observed possible manifestations of original antigenic sin occurring with repeated inoculation with flu virus variants, in mice. With that said, Dr. Jernigan has mentioned that there are more related studies on-going, assessing the efficacy of vaccination in people that receive the flu virus repeatedly, every year. Thus, here we are once again with the question: To vaccinate, or not to vaccinate?

With that, it brings me to the final point of issue, about citizens being dedicated to the cause of being vaccinated and protecting their fellow neighbor, and themselves. Why would people be so hesitant to go out and get a free shot that is intended to protect them from this potentially life-threatening disease? As a young black man, I can safely say that the United States government and scientific community do not have the best track record with the black community, most notably due to the syphilis Tuskegee experiments, but not limited to that alone. Trust is very difficult to regain after it has been lost and at minimum it requires time and consistent showcases that these entities mean well to us as a people; it's a relationship that requires constant nurturing. One study has shown that education level and socio-economic status increases the likelihood of vaccine-uptake in our community. That same study observed that participants felt less incentivized to get the vaccine, unless a deadly outbreak were to occur, yet their reasoning for not getting it differed. The white participants were less worried about the consequences of being sick and opted to roll the dice, while the black participants expressed unease about the safety of the shot itself.

Apart from figuring out how to manipulate the minds of people to be scared or coerced into taking the shot, for the sake of those that are genuinely fearful of the consequences of receiving the vaccine, I believe conducting simple and concise studies that show black people are not more predisposed to negative side effects than other demographics after taking the shot. I personally know people that claim they were made very sick by the flu shot, and although this occurrence may be seen as tough love by the vaccine to tune their immune systems, no one expects to go through that for protection when that's not the intended reaction to the vaccine. Plus, this may simply be an effect of the aforementioned "original antigenic sin", which in this case could be avoided altogether. I single out my own demographic in this case, but I understand that this concern is shared by other groups, as well. On this two way street of communication, we have to make the effort to calm fears with the necessary facts, if possible, and those that express concern must be willing to pursue the information to become better informed.

We obviously have a long way to go before we can possibly have a universal vaccine that works regardless of the strain of influenza. Until there are more solid conclusions made going forward to help alleviate some of the distrust and confusion about how we rebound from this sub-par year, there may yet remain many fluvaccine atheists. It's our job in the scientific community to remain transparent to the people who depend on us the most, and address the concerns of the public the best we can. Hopefully we take what we learned this year and make some improvements for next year. Stay healthy!

GaBio Names Mountain View High School Junior as Georgia BioGENEius Winner

Georgia Bio and the Georgia BioEd Institute today named Suraj Modi, Mountain View High School junior of Lawrenceville, GA, as the winner of the 2018 Georgia BioGENEius Challenge, the premier competition for high school students that recognizes outstanding research and innovation in the biotechnology field. As Georgia's BioGENEius finalist, Suraj will attend the 2018 BIO International Convention, the industry's trade conference from June 3-6 in Boston, MA, where he will engage with leading companies, scientists and innovators currently transforming the scientific landscape in order to gain valuable insights into an industry making significant contributions to the world.

While in Boston, Suraj will compete against high school students from the U.S., Canada and Germany in the International BioGENEius Challenge. The student projects will represent a range of biotechnology topics such as healthcare, agriculture, and the environment.



Suraj's award-winning research uses algorithms to predict epileptic seizures. Epilepsy affects over 3.4 million people in the United States alone. Approximately 200,000 new cases of epilepsy are diagnosed each year. The purpose of this project was to detect seizures at least 5 minutes prior to their occurrence through preictal, ictal, and interictal brainwave differentiation. It can be used to save the lives of epileptic patients and provide them with a warning of an oncoming seizure.

"The BioGENEius Challenge highlights the breakthroughs made when we invest in and encourage young people to pursue their ideas," said Georgia Bio President and CEO Russell Allen. "Georgia Bio is thrilled that Suraj will represent our state at the upcoming BIO Convention. We are proud to support this Georgia scholar as he develops tomorrow's healthcare innovations."

Georgia Bio also congratulates the Georgia BioGENEius runner-up, Zoe Weiss of Lakeside High School in Atlanta, GA. Weiss' research enabled her to create a powerful method to detect rare cell types in a large population of cells. Rare cell type detection would advance early disease diagnosis (e.g., cancer) and allow identification of new cell types.

Judging the 2018 Georgia BioGENEius were Jamie L. Graham, Kilpatrick Townsend & Stockton; Kami McMillan, Chubb; Alex Harvey, Viamune; Monica Dias Figueiredo, Boehringer Ingelheim Animal Health; and Ian Biggs, UGA.

National and International winners will be announced during June 4-7, 2018 BIO International Convention. Winners will receive cash scholarships.

Recognizing Industry Excellence at the 20th Anniversary of GaBio's Life Sciences Impact Awards

Kristen Pappaterra, Georgia Bio

On February 15th, Georgia Bio celebrated its 20th Anniversary of the Life Sciences Health Impact Awards at the Cobb Energy Performing Arts Centre in Atlanta. Each year, Georgia Bio raises a toast to excellence and recognizes outstanding achievements by life sciences industry leaders in Georgia.

Nearly 250 members of Georgia's life sciences community attended this year. The annual awards celebration spotlights industry accomplishments throughout the evening, celebrating those individuals, companies and organizations that impact our industry.

2018 Industry Growth Winners



The evening's top recognition, the Industry Growth Awards, which recognizes people in the public and private sectors whose extraordinary accomplishments move our industry light years ahead, were presented to: **Robert E. Guldberg**, Ph.D., The Petit Director's Chair in Bioengineering and Bioscience; Executive Director, Parker H. Petit Institute for Bioengineering and Bioscience; and Professor, George W. Woodruff School of Mechanical Engineering, Georgia Institute of Technology and **James Weyhenmeyer**, Ph.D., VP Research & Economic Development, Georgia State University and Chairman, GSU Research Foundation Inc.

Tuesday May 8, 2018

New Location! The Manor Golf & Country Club Milton, Georgia

Our signature fundraising event to benefit the Georgia BioEd Institute biotech & medtech STEM programming



SWINGS FORE S T E M

The Fourth Annual Georgia BioEd Golf Outing New Georgia Bio Chair, Patty Fritz, VP, US Corporate Affairs for UCB Inc., provided the evening's opening remarks. She stressed her pride in the rich life-sciences sector in the state and the importance of increased collaborations that leverage unique expertise which can help us as an industry find solutions faster. As new chair, Ms. Fritz made it clear that her tenure as chair will have a strong emphasis on fostering new talent and encouraging diversity across the industry. She remarked, "As an industry, we have a responsibility to foster new talent and encourage diversity. We can encourage and develop women to take leadership positions in the life sciences. We can drive greater diversity through our support in STEM education and in candidate selection for key leadership roles across our industry. Georgia can lead the way."

Georgia Bio would like to thank its sponsors, the awards committee and the life sciences community for another successful celebration of the outstanding accomplishments of the winners in each category.

The event was made possible by presenting sponsor UCB Inc., with additional support from Arbor Pharmaceuticals, MiRus and VWR. Photos are available for viewing at www.gabio.org/awards.



2018 Award Winners include:

Georgia Bio Industry Growth Award

- Robert E. Guldberg, Ph.D., The Petit Director's Chair in Bioengineering and Bioscience; Executive Director, Parker H.
 Petit Institute for Bioengineering and Bioscience; and Professor, George W. Woodruff School of Mechanical Engineering, Georgia Institute of Technology
- James Weyhenmeyer, Ph.D., VP Research & Economic Development, Georgia State University and Chairman, GSU Research Foundation Inc.

Deals of the Year

- Center for Biotechnology and Genomic Medicine at Augusta University
- CryoLife
- Femasys
- Georgia Clinical & Translational Science Alliance
- NSF Engineering Research Center for Cell Manufacturing Technologies (CMaT)
- Vertera Spine

Phoenix Award: UGA Center for Vaccines and Immunology / Sanofi Pasteur

Innovation Award

- Aruna Biomedical
- George Hsu, M.D., Chief Medical Officer / Interim CEO, Cathaid Inc.
- James Ross, Ph.D., Chief Technology Officer, Axion BioSystems
- PanXome

Georgia Bio Community Award

- Sherry N. Farrugia, Chief Operating and Strategy Officer, Pediatric Technology Center, Georgia Institute of Technology; Director, Children's Healthcare of Atlanta Partnership
- Christopher D. McKinney, DA, MBA, Associate Vice President, Innovation Commercialization; Adjunct Professor of Political Science, Augusta University
- Center for Tropical and Emerging Global Diseases
- Suzanne Prichett, Field Sales Manager Education & Medical Research Division, VWR International LLC
- Atlanta Center for Medical Research

Emerging Leader of the Year

- Ashley Bohn, Ph.D., M.S., R.V.T, Georgia State University
- Tami Hutto, MSPP, Program Manager Emory University and Georgia Institute of Technology, Atlanta BEST Program

Teacher of the Year: William E. Schuyler, Forsyth Central High School

GaBio Legislative Watch: Session Recap

The legislative session concluded with Sine Die on Thursday, March 29. All bills that successfully made it through this year will now head to the Governor's desk for his approval. He has 40 days to sign or veto legislation.

This legislative session was characterized by a highly charged political environment going into the 2018 elections. After eight years in office, Governor Deal will finish out his final year as Governor and there is a large field of candidates gearing up for the Republican and Democratic primaries on May 22. Georgia Bio will monitor election activity over the next months and keep members informed on election results. Georgia Bio will also be working with our members this year on our legislative priorities going into the 2019 session.

We encourage you to view the complete session recap and other <u>Legislative Watch publications here</u>.

BIO 2018
IS BACK IN BOSTON

Start Planning to Make History

The BIO International Convention is back in Boston, June 4-7, to celebrate history-making innovation.

Join us at BIO 2018 to take advantage of unparalleled business partnering, thousands of exciting exhibits, gain insights from thought leaders in hundreds of education sessions, and network with 16,000+ global biotech and pharma leaders all week long.

Registration opens late January.

Learn more at convention.bio.org.

BOSTON, MA

JUNE 4-7, 2018

CONVENTION.BIO.ORG

#BI02018



Featured Core Member: **Jinfiniti Diagnostics**

Jinfiniti Diagnostics seeks to provide innovative solutions for predictive, preventive and precision medicine. These solutions target common and complex diseases including diabetes, diabetic complications and chronic kidney diseases. Jinfiniti licenses and develops innovative technologies, seek FDA approval for and market proprietary clinical test kits, and provide clinical tests in its own CLIA-certified laboratories.

Learn more here.

Featured Supporting Member: Sidney Lee Welding Supply, Inc.

Sidney Lee Welding was founded in 1968, with the goal of providing the best products and the highest level of customer service. Sidney Lee ensures quick delivery of products from their five well-stocked locations. They carry a large inventory of welding gases in cylinders and tanks, in a wide variety of sizes for all your welding applications in aluminum and stainless steel.

Learn more here.

Upcoming Events

GA Bioscience & Health IT Career Fair April 13, 2018

BIO Legislative Day Fly-In April 17-18, 2018

STEM Institute on Teaching and Learning April 18, 2018

<u>Careers in Life Sciences Series: Session 1</u> April 24, 2018

Success Stories: Turning UGA Research into Products April 24, 2018

<u>Crop, Animal and Food Tech Showcase</u> April 24-25, 2018

ChinaBio® Partnering Forum 2018 April 25-26, 2018

<u>Spring IEN Soft Lithography for Microfluidics Short Course</u> April 26-27, 2018

SEMDA 2018: Medtech Conference May 1-3, 2018

World Trade Day Conference & Networking Event May 4, 2018

Swings Fore STEM Golf Outing 2018 May 8, 2018

Bill Foege Global Health Awards May 9, 2018

Spring 2018 NanoFANS FORUM May 9, 2018

GaBio Member Benefits Webinar May 15, 2018 WIB-Atlanta Presents CDC Museum Tour & Reception May 24, 2018

BIO Executive Training Programs June 2-4, 2018

2018 BIO International Convention June 4-7, 2018

New York Venture Summit June 10-11, 2018

World Drug Safety Congress 2018 September 10-11, 2018

2018 Georgia Bio Innovation Summit October 9, 2018

World Orphan Drug Congress 2018 November 6-8, 2018

<u>SEBIO 2018</u> November 13-14, 2018

Welcome New Members

- BabyLogger
- Clean Hands Safe Hands
- Decide DeKalb Development Authority
- Hub Hygiene
- Lena Biosciences
- Patientory
- Rimidi
- Sanus Solutions
- Sidney Lee Welding Supply, Inc.
- TQ Intelligence, Inc.

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