Zalgen Labs Develops and Deploys Solutions to Emerging Viral Threats

Zalgen Labs staff with their research and technology in Sierra Leone, West Africa at the Khan Center of Excellence for Viral Hemorrhagic Fever Research at Kenema Government Hospital (KGH).

Zalgen Labs is making a difference for patients around the world with solutions to viral threats and neglected tropical diseases. They specialize in the design and production of superior biological molecules critical for the development and commercialization of immunotherapeutics, novel vaccines, and reliable, rapid, and affordable diagnostic platforms targeting neglected and underrepresented human infectious diseases.

CBSA President and CEO, Jennifer Jones Paton, asked Douglass Simpson, Senior Advisor at Zalgen Labs, CBSA's Key Questions for Life Sciences Innovators.

Q: Tell us about your company or organization.

A: Zalgen is headquartered in Germantown, Maryland, with a diagnostics development and manufacturing center at Fitzsimons Innovation Community. Founded in 2011, Zalgen has experienced steady expansion and revenue growth. We are focusing on critical steps in characterization of lead candidate antibodies, reagents, and technologies enabling the development of a first-in-class immunotherapeutic for prophylaxis and post-exposure treatment of Lassa Fever. This product, Arevirumab-3™, now in advanced pre-clinical stages, features a unique, rationally designed cocktail of fully human antibodies against a viral infectious disease, aimed at increasing the protective efficacy of the treatment, while decreasing the virus' ability to generate escape mutants.

"We are increasing the protective efficacy of the treatment, while decreasing the virus' ability to generate escape mutants."

Q: Describe your team culture. How does your culture shape what your company or organization produces or offers?

A: Our team is aligned by a common goal and team cohesion is fostered by emphasizing cooperation, communication, and respect.

A significant contributor to Zalgen's growth has been our culture of working with academic, clinical and industry partners with similar interest in hemorrhagic fevers. We are a member of several major consortiums including the Viral Hemorrhagic Fever Consortium (VHFC) and the Viral Hemorrhagic Fever Immunotherapeutic Consortium (VIC), which includes Tulane University, Scripps Research, La Jolla Institute of Immunology, Broad Institute, Harvard University, University of California at San Diego, University of Texas Medical Branch, Kenema Government Hospital (Sierra Leone), Irrua Specialist Teaching Hospital (Nigeria), Redeemers University (Nigeria), and various other organizations in West Africa.

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Q: What are you working on right now?

A: Most of our effort today is focused on arenaviruses (Lassa and Junin) and filoviruses (Ebola and Marburg), supporting epidemiology efforts of numerous vaccine developers, and providing critical reagents and research diagnostic tests for numerous research programs here in the US and in Africa. Arevirumab, our most important project, is rapidly approaching pre-IND submission.

Q: How will your work save or change lives?

A: We focus on neglected tropical diseases that mainly affect some of the most neglected populations in the world. Alongside our various partners, we are actively developing the medical countermeasures critical to addressing these highly fatal diseases, endemic in Africa but also considered global bio-threats.

Q: How has COVID-19 impacted your company or organization?

A: We have managed to keep both our Maryland and Colorado facilities open throughout the pandemic. We kept our Fitzsimons office open to support clinical research projects conducted by Tulane collaborators during the New Orleans outbreak. Fortunately, none of our employees have contracted the virus. Our business has been impacted in many ways including dealing with sporadic quarantine requirements, significant supply chain disruptions, and travel limitations.

Q: CBSA champions a collaborative life sciences ecosystem because we are #stongertogether. How has being an active participant in our life sciences community supported your success?

A: Colorado life sciences companies are highly receptive to collaborating and CBSA has led the effort on our behalf here in the state. We are fortunate to have University of Colorado and Colorado State University providing a steady stream of new talent that we to address our growth expectations. In 2016, opening a lab in Colorado, there was very limited biotech space available to meet our needs. The flexibility of the Fitzsimons Innovation Community has enabled us to significantly grow our operation. They met our needs when from the start and continue to support us as we strive to make a difference in combatting viral hemorrhagic fevers.

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