



## **Carbon Biosciences Launches with \$38 Million Series A Financing to Advance Novel Gene Therapy Platform and Pipeline**

- *Carbon is developing a novel parvovirus-based vector platform with demonstrated in-vivo tissue specificity, increased cargo capacity, and minimal natural neutralizing immunity; widens patient applicability and may enable gene therapy re-administration*
- *Carbon's lead candidate, CGT-001, targets lung tissue with demonstrated upper airway tissue tropism and repeatable dosing in gold-standard cystic fibrosis models*
- *Financing will advance its lead cystic fibrosis program towards the clinic and the development of its proprietary platform*

BOSTON, Mass. – June 21, 2022 —Carbon Biosciences (“Carbon”), a Longwood Fund founded biotech company and emerging leader in the development of novel parvovirus-derived gene therapies, today announced a \$38 million Series A financing led by Agent Capital. Agent is joined by Longwood Fund, Astellas Venture Management LLC, the Cystic Fibrosis Foundation, Solasta Ventures, University of Tokyo Innovation Platform (UTokyoIPC), and Camford Capital. Carbon is harnessing novel parvovirus vectors that can deliver larger gene therapy payloads with enhanced tissue specificity and with minimal neutralizing immunity. The company plans to use the Series A funding to advance the development of Carbon’s programs for genetic diseases, initially building on the groundbreaking research of scientific co-founders John F. Engelhardt, Ph.D., Director, Center for Gene Therapy at the University of Iowa, and Robert M. Kotin, Ph.D., Professor of Microbiology and Physiological Systems at the University of Massachusetts Chan Medical School.

“Carbon’s platform has the potential to expand the role of gene therapy in treating some of the world’s most devastating and difficult to treat diseases,” said Joel Schneider Ph.D., President and CEO of Carbon Biosciences. “Our vision is to enable a new generation of genetic medicines with differentiated vectors that have the potential to address the immunological, targeting and payload limitations inherent in current viral and non-viral delivery technologies. As the first jointly funded program launched under a collaborative agreement between the Cystic Fibrosis Foundation and Longwood Fund, we are motivated by the potential impact our research may have in significantly improving care for cystic fibrosis patients.”

“Identifying vectors that can effectively deliver therapeutics to target tissues, such as the lung, has been a major challenge in realizing the full potential of gene therapy,” said Geeta Vemuri, Ph.D., Managing Partner and Founder of Agent Capital. “We believe that Carbon's proprietary platform can address this

challenge by leveraging novel vectors from the broader parvovirus family to deliver optimal payloads to specific tissues. Carbon's technology will enable a diversified pipeline with potential applications across the wide range of tissues impacted in many unaddressed diseases."

"Carbon's novel platform addresses key challenges with AAV and non-viral based therapies. Our lead program is the first gene therapy program demonstrating tissue tropism to the lung with the capacity to deliver the full length CFTR gene and an appropriate promotor," said John F. Engelhardt, Ph.D., the Roy J. Carver Chair in Molecular Medicine, and Director, Center for Gene Therapy at the University of Iowa. "Preliminary pre-clinical data as well as studies on human populations suggest wide applicability of our lead clinical candidate and the potential to re-dose patients."

Carbon's scientific co-founders and scientific advisory board members are among the most experienced thought leaders in the gene therapy field. In addition to Kotin and Engelhardt, Carbon's co-founders are David Steinberg, who served as founding CEO (Longwood Fund); Jianming Qiu, Ph.D., (University of Kansas); Ziyang Yan, Ph.D., (University of Iowa); Sebastian Aguirre, Ph.D., (Carbon Biosciences); and Lucy Liu, Ph.D., (Longwood Fund). Carbon's Scientific Advisory Board consists of John Engelhardt; Jay Chiorini Ph.D., Senior Investigator at NIH National Institute of Dental and Craniofacial Research; Beverly Davidson, Ph.D., Chief Scientific Strategy Officer at Children's Hospital of Philadelphia; and Adrian Thrasher, Ph.D., MBBS, FRCP, MRCP, Professor at University College London (UCL), Great Ormond Street Institute of Child Health, Head of Infection and Inflammation and Director, Clinical Gene Therapy GMP Facility at UCL.

In conjunction with the financing, Joel Schneider, Ph.D, joins as President and CEO. Chen Schor, Adicet Bio President and CEO, joins as Board Chair. David Steinberg, Geeta Vemuri, Robert Kotin and Derek Yoon, President and CEO of Solasta Ventures, join the Board of Directors.

### **About Carbon Biosciences**

Carbon Biosciences is expanding the therapeutic potential of gene therapy through its proprietary platform which leverages novel parvoviruses that have been pressure tested by nature to target specific tissues and carry a larger cargo with minimal neutralizing immunity and the potential to re-dose. Founded by Longwood Fund and gene therapy pioneers, John F. Engelhardt, Ph.D., and Robert M. Kotin, Ph.D., Carbon is expanding the gene therapy toolbox for the treatment of the world's most devastating and difficult to treat diseases. For more information, please visit our website [www.carbonbio.com](http://www.carbonbio.com) and follow us on [LinkedIn](#).

### **About Longwood Fund**

Longwood Fund is a venture capital firm dedicated to creating and investing in novel healthcare companies that develop important treatments to help patients while targeting significant value for investors. The Longwood team has a long history of successfully launching and building important life science companies while providing operational leadership and strategic guidance. Collectively, the Partners at Longwood Fund have co-founded 24 companies with over 20 launched or marketed drugs and therapies, as well as over two dozen clinical stage assets, all focused on helping patients in need.

Companies founded by Longwood Fund, or its principals prior to the founding of the Firm, as lead investor and CEO/CBO include Vertex, Acceleron, Momenta, Alnylam, Sirtris, Vor, TScan, Pyxis Oncology, Immunitas, Be Biopharma, ImmuneID, Tome Bio, Photys, and Carbon Biosciences. For more information, visit [www.longwoodfund.com](http://www.longwoodfund.com).

### **About Agent Capital**

Agent Capital is an international life sciences investment firm that supports disruptive healthcare companies focusing on novel, differentiated therapeutics and treatments that address unmet patient needs. Agent Capital aligns with scientists, entrepreneurs, and other investors to develop the next generation of healthcare innovations, leverages their industry expertise and successful track record to source premier deals, accelerate value, and drive successful exits. Their first fund invested in 15 portfolio companies, the majority of which have executed collaborations with major pharmaceutical companies and successfully raised additional capital in the private or public markets. For more information, please visit Agent Capital's website at [www.agentcapital.com](http://www.agentcapital.com).

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