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MilliporeSigma and Baylor College of Medicine Advance Vaccine Development and Manufacturing for Neglected Diseases

- **Collaboration furthers both parties' commitment to advance research and development for neglected diseases**
- **Agreement focuses on optimizing vaccine process development and formulation and exchanging know-how**

Billerica, Massachusetts, August 8, 2017 – MilliporeSigma today announced that it has formed a strategic alliance with Baylor College of Medicine, Houston, Texas, and its vaccine product development partnership (PDP), Texas Children's Hospital Center for Vaccine Development (Texas Children's CVD), to advance vaccine research and development for neglected and emerging infections.

The collaboration focuses on bringing vaccines through development to efficiently deliver them to societies in need. MilliporeSigma's experts in process development and formulation are working with Texas Children's CVD scientists at Baylor to optimize the vaccine manufacturing process to increase vaccine stability and yield. Initially, these activities are targeting schistosomiasis, a deadly parasitic disease that affects millions of people a year in tropical and subtropical regions.

"Our purpose is to solve the toughest problems in life science by collaborating with the global scientific community," said Udit Batra, CEO, MilliporeSigma. "The alliance with Baylor College of Medicine, one of the premier research universities in the world, is the ideal partnership to advance vaccine development and manufacturing. Together, we will support the fight against infectious diseases."



News Release

The collaboration includes training and exchange of technical know-how in process development and formulation, filling knowledge gaps that exist from research and development to manufacturing, with a focus on neglected and emerging diseases. Dr. Peter Hotez, founding Dean of the National School of Tropical Medicine at Baylor College of Medicine and co-director of the PDP, recently presented on the topic at an Access to Medicine event earlier this year in Darmstadt, Germany.

"We are excited to partner with MilliporeSigma in order to advance this important vaccine. Today, schistosomiasis is considered one of the world's most devastating neglected tropical diseases, affecting hundreds of millions of the world's poorest people. We are excited about our new collaboration with MilliporeSigma to advance this lifesaving vaccine," said Dr. Hotez.

Dr. Maria-Elena Bottazzi, Deputy Director of Texas Children's Hospital Center for Vaccine Development, said, "The scientific knowledge exchange from this partnership will catalyze and accelerate the product development of much-needed vaccines against the diseases of poverty. It will serve as a framework for capacity building and will establish self-reliance in vaccine development and manufacturing around the globe."

This collaboration, together with the recently announced public-private partnership with the Australian Institute of Tropical Health and Medicine (James Cook University, Queensland), the Australian Government's investment promotion agency, and Baylor College of Medicine, furthers both parties' commitment to advancing research in neglected diseases globally.

About Baylor College of Medicine

Baylor College of Medicine (www.bcm.edu) in Houston is recognized as a premier academic health sciences center and is known for excellence in education, research and patient care. It is the only private medical school in the greater southwest and is ranked 21st among medical schools for research and 8th for primary care by *U.S. News & World Report*. Baylor is listed 19th among all U.S. medical schools for National Institutes of Health funding and number one in Texas. Located in the Texas Medical Center, Baylor has affiliations with seven teaching hospitals and jointly owns and operates Baylor St. Luke's Medical Center, part of CHI St. Luke's Health. Currently, Baylor trains more than 3,000 medical, graduate, nurse anesthesia, physician assistant and orthotics students, as well as residents and post-doctoral fellows.

News Release

In 2011, Baylor launched the National School of Tropical Medicine, which together with Texas Children's Hospital Center for Vaccine Development is leading an innovative product development partnership model for the research & development of new vaccines to combat the world's neglected tropical diseases.

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About the Life Science Business of Merck KGaA, Darmstadt, Germany

The life science business of Merck KGaA, Darmstadt, Germany, which operates as MilliporeSigma in the U.S. and Canada, has 19,000 employees and 65 manufacturing sites worldwide, with a portfolio of more than 300,000 products enabling scientific discovery. Udit Batra is the global chief executive officer of MilliporeSigma.

Merck KGaA, Darmstadt, Germany completed its \$17 billion acquisition of Sigma-Aldrich in November 2015, creating a leader in the \$125 billion global life science industry.

Merck KGaA, Darmstadt, Germany is a leading company for innovative and top-quality high-tech products in healthcare, life science and performance materials. The company has six businesses – Biopharmaceuticals, Consumer Health, Allergopharma, Biosimilars, Life Science and Performance Materials – and generated sales of €15 billion in 2016. Around 50,000 employees work in 66 countries to improve the quality of life for patients, to foster the success of customers and to help meet global challenges.

Merck KGaA, Darmstadt, Germany is the world's oldest pharmaceutical and chemical company – since 1668, the company has stood for innovation, business success and responsible entrepreneurship. Holding an approximately 70 percent interest, the founding family remains the majority owner of the company to this day. The company holds the global rights to the name and the trademark "Merck" internationally except for the United States and Canada, where the company operates as EMD Serono, MilliporeSigma and EMD Performance Materials.