Philadelphia Conference Focuses on Diagnosis and Treatment of Bacterial Pathogens in Crohn's Disease.

PHILADELPHIA, PA, April 4, 2017 -- Investigators from around the world gathered in Philadelphia at the end of March to present results on the diagnosis and treatment of the pathogen *Mycobacterium avium* subspecies *paratuberculosis*, or MAP. MAP is known to cause Johne's disease, a Crohn's-like condition in ruminants. Convincing evidence has been accruing that MAP is the most likely infective cause of Crohn's disease. The primary purpose of the meeting was to gather researchers for face-to-face discussions, and to seek consensus about diagnostic tests and therapeutic options for detection and control of MAP in Crohn's disease. Presentations were given over two days by 23 researchers studying different aspects of MAP science. A more detailed consensus statement will be forthcoming.

By USDA estimates, the prevalence of MAP in the dairy herds has increased from 21.6% in 1996 to 91.1% in 2007. In comparison, the incidence of Crohn's disease has increased 12-15% since 2011. Animals with Johne's disease spread MAP into the environment through manure where it can survive for roughly one year and infect numerous animals. Viable MAP in milk is not completely inactivated by current pasteurization methods, and live MAP has been found in rivers, treated municipal water, milk, cheese and other dairy products, including commercial infant formula. MAP infects humans as live MAP can be cultured from the blood and milk of Crohn's disease patients and also from some asymptomatic individuals. Studies have shown that MAP can be eliminated from dairy herds, but the USDA interest in doing so is low because, to date, MAP has not been formally recognized as causing human disease.

*Based on the data presented at the conference, the scientists and physicians in attendance agreed the pendulum has swung and implicates MAP as a zoonosis: a disease transmitted from animals to humans.*

Dr. Thomas Borody, Dr. William Chamberlin, Dr. David Graham and Dr. J. Todd Kuenstner agree that "Crohn's disease is simply human Johne's disease. We can never absolutely prove causality but at some point we must act. We must limit the spread of MAP in the barnyard, impede its transmission to humans and treat it when associated with human chronic inflammatory diseases."

As discussed at the conference, diagnostic methods have become increasingly more refined and reliable, which will enable further studies to elucidate the complex role that MAP plays in human disease.

"It is now possible for researchers to culture, identify and confirm the presence of MAP in tissues and peripheral blood of Crohn's patients. This shows great promise for the development of newer methods of novel, timely and clinically relevant diagnostic techniques to accompany the new therapeutic options," says John Aitken of Otakaro Pathways

Importantly, a Phase III FDA trial (NCT01951326) of a specific combination of antibiotics began in 2014, which is actively recruiting patients with Crohn's disease with the goal of showing that treatment of the MAP infection is at least as effective as standard therapy and to date has resulted in long term profound
remission/functional cure in a small number of patients. Still, further research funding must be made available to provide definitive answers to questions about MAP.

Full recordings of the presentations from the Philadelphia Crohn's Conference and additional information can be found at HumanPara.org. For media inquiries only, please contact Dr. William Chamberlin at (915) 490-0715, wchambrlin@aol.com or the Human Paratuberculosis Foundation by email at humanpara@gmail.com.

About Human Paratuberculosis Foundation
Human Paratuberculosis Foundation is a recently formed non-profit organization which seeks to sponsor innovative human MAP research and to provide education about the science of MAP to patients and health care providers.