MOUNTAIN VIEW, California, March 2, 2017 — Specific Technologies announces discovery of a CRE signature in *E. coli.* growing in culture, to be presented at ECCMID global summit in April

Specific Technologies, which has developed a new microbiology diagnostic paradigm combining detection and identification (ID) of microorganisms growing in culture, announces today the discovery of a unique signature for deadly Carbapenem-resistant Enterobacteriaceae (CRE) strains of *E. coli*. Specific will present its findings at the 27th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), on April 24, 2017, in Vienna, Austria.

Based on a printed, disposable volatile-sensitive sensor array, Specific's diagnostic system, SpecID, obtains a strain-specific "fingerprint" of bacteria as they grow in culture, combining detection, Gram status and ID into one rapid step. As will be detailed in a presentation at ECCMID, this fingerprint is predictive of the CRE phenotype in *E. coli.* in over 90% of the cases tested thus far. This predictive correlation, if validated in clinical studies, could provide caregivers an unprecedentedly early and desperately needed warning of CRE in *E. coli.*-mediated blood infection, one of the deadliest human disease conditions. Blood infection is by far the leading cause of death in hospitals[1], and *E. coli.* is among the most prevalent causes of blood infection in the US.

Such an early CRE signature could offer an indication that the infection is highly antibiotic-resistant at the earliest possible time, during primary culture, allowing doctors to react days earlier than is possible with current methods, rapidly shifting therapy away from ineffective broad-spectrum antibiotics to an effective alternative. The CRE indication could also prompt appropriate measures to avoid transmission to other patients and caregivers. Specific believes that this is the first report of any diagnostic system which can detect CRE during primary culture.

"We believe that this discovery could have, if validated, substantial and broad clinical impact," said Dr. Paul Rhodes, Chief Executive Officer of Specific Technologies. "We invite researchers with interests ranging from clinical care of blood infection to the metabolomics of drug resistance mechanisms to visit our poster, interact with our scientists and visit our booth."

The abstract will be presented at ECCMID in Vienna, Austria, which will be held from April 22-25, 2017 at the Reed Exhibitions Messe Wein. The Specific Technologies team will be available during the conference at booth #13B.

About the SpecID System

During growth in culture, bacteria produce small molecule volatile metabolites unique to their species and in some cases to their strain. Utilizing an inexpensive printed chemical sensor array to obtain a fingerprint that combines detection and identification into a simple, automated

single step, the novel SpecID system identifies microorganisms from a phenotypic metabolic signature obtained during growth.

About Specific Technologies

Specific Technologies' industry-leading team has developed clinically proven, regulated in vitro diagnostic systems based upon a unique, low cost and labor-saving metabolic signature technology that enables rapid detection, Gram status and identification (ID) of microorganisms directly in the blood culture bottle. The Company's patented chemical fingerprint allows ID to be determined in a single, hands-free step, enabling faster time-to-result, laboratory costs savings and labor saving that speed time from sample-to-answer. Leveraging the same innovative technology, Specific is also developing an antibiotic susceptibility testing (AST) paradigm that would represent a new level of speed, ease of use and affordability in the all-important phenotypic determination of antibiotic susceptibility. These two systems work in concert to offer a modernized next-generation work flow for the microbiology laboratory. Specific Technologies is located in Mountain View, CA.

Corporate Contact:

Email: press@specifictechnologies.net

1 Liu, V. *et al*. "Hospital Deaths in Patients with Sepsis from 2 Independent Cohorts." *J. Am. Med. Assoc.* 2014, 312, 90.