2018S 7 Lombardini

Application Title: Enhancing Capacity for Coffee Science and Education at Texas A&M

Lead contact: Leonardo Lombardini – Professor, Department of Horticultural Sciences; Director,

Center for Coffee research & Education

Email address: l-lombardini@tamu.edu; Phone number: 979-845-8242

Key Participating Units:

College of Agriculture and Life Sciences: Departments of Horticultural Sciences, Animal Science, Agricultural Economics, Nutrition and Food Science, Plant Pathology & Microbiology, Soil and Crop Sciences; College of Education & Human Development: Department of Education and Human Psychology; College of Engineering: Departments of Chemical Engineering and Nuclear Engineering; Institute for Sustainable Communities; Norman Borlaug Institute for International Agriculture; Texas A&M AgriLife Research - Weslaco.

Amount requested: \$1,185,010.

Executive summary: The coffee industry provides millions of jobs worldwide and generates an income of \$68 billion in the US alone. Despite this incredible cultural and economic importance, technological advancement has remained relatively low at many points along the coffee supply chain. Some major limitations are lack of adequate training facilities, the need for specialized and expensive equipment, and disjointedness between the sciences of production and consumption.

Building off past successes in coffee development¹ and in response to the growing needs of the industry, the Center for Coffee Research and Education (CCRE) was established in September 2016, with the mission "to improve the quality and supply of coffee globally through research and capacity building." Housed in the Borlaug Institute for International Agriculture at Texas A&M University (TAMU), the CCRE is providing much needed research, development and education in coffee, both in the US and abroad. In just over one year's time projects have been secured in coffee producing countries with partners such as USAID, World Coffee Research and The Starbucks Foundation. In addition to these connections, the CCRE is continually approached by industry and private sector organizations looking to procure services and support coffee research and technological advancements, as well as researchers at undergraduate, graduate and faculty levels who seek collaboration. Building upon these efforts and connections, we propose to develop the Texas A&M Coffee Science Lab (CSL) to make TAMU the go-to institution for coffee science and education. This lab will be a state-of-the-art research and training facility and a certified Specialty Coffee Association (SCA) Campus². While being the closest facility of its kind to Latin America, the largest coffee-producing region in the world, the on-campus location will also allow TAMU faculty, researchers and students to perform post-production research, adding to current work in coffee genetics, disease resistance, production management and sensory evaluation, making TAMU the premier location for all aspects of coffee science. The proposed CLS will represent an essential qualification to obtain grants and will allow TAMU faculty and students to investigate post-harvest coffee science using state-of-the-art equipment, facilitate industry collaborations, and make TAMU the largest and most advanced SCA-certified training facility in the southern US. The Lab will also offer unparalleled learning opportunities for students, add to TAMU's excellent reputation in coffee development, and increase prestige as a globally renowned institution in coffee science and education.

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¹ https://blog.intelligentsiacoffee.com/2017/01/11/rwanda-begin-at-the-beginning/

² http://scaaeducation.org/campuses/