

thousands of school gardens have appeared across the country (Robinson-O'Brien and Story, 2009). Two such examples are "The Edible Schoolyard Project", in Berkley, California and the "Growing Up Green Charter School" in Long Island City, NY. Benefits that have been reported include increases in teamwork, improved nutrition and environmental attitudes, and respect, both for self and others (Edible, 2010; Growing Up Green, 2009). While school gardens are generally accepted as beneficial, few peer-reviewed studies have been conducted to examine school garden programs (Ozer, 2007; Robinson-O'Brien and Story, 2009). Since January 2009, Fayetteville School (FHS)—a K–12 school in Fayetteville, AL—has been involved in a landscape project that has transformed the school's campus. So far, an expansive children's garden and over 400 trees and shrubs have been installed. Many of Fayetteville's community, staff and students have been involved in the project, with each of Fayetteville's 650 students having the opportunity to be a part of planting, while many have been much more involved. This study evaluated the landscape project using a case study method. Semi-structured interviews lasting 30–60 minutes were conducted with 14 faculty and staff at Fayetteville School. Several themes were observed including an overall positive view of the project, an increase in school pride, and an increase in use of the school grounds for both recreation and education. Challenges reported included lack of time to maintain the grounds and a lack of time to incorporate the grounds into school lessons. These results may offer the school insight into ways they can improve the ongoing landscape project. They may also benefit other schools hoping to implement a similar project, as these other schools can learn from the successes and struggles of the landscape project at Fayetteville.

3:15–3:30 PM

### **Can Locally-grown Crops Replace Nonfat Dry Milk in Ready-to-Use-Therapeutic Foods? Innovative Malnutrition Solutions for Haiti**

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Ready to use therapeutic foods (RUTFs) are employed when individuals reach levels of malnourishment that are immediately

life-threatening or that undermine long-term quality of life. RUTF formulation, preparation, distribution, and administration is complex, technically demanding, and input specific. It can also engage horticulturists operating in multidisciplinary, outcome-oriented teams. Nourimanba—effective but expensive—has been prepared, distributed and administered by Abbott Nutrition and its partners in Haiti. Nonfat dry milk (NFDM) is the most expensive of the four ingredients in Nourimanba and it is imported. At Abbott Nutrition's invitation, this team set out to identify a crop-based alternative to NFDM that can be grown in or near Haiti's Central Plateau. Our specific objectives were: 1) identify candidate crops with a composition profile that may qualify them for use in a re-formulated Nourimanba; 2) identify a smaller subset of candidate crops that also appear to be adapted to the production conditions of Haiti's Central Plateau; and 3) estimate the amount of acreage required to produce one or more candidate-adapted crops in quantities allowing for a substantial reduction in NFDM use and related increases in Haitian farm-based income opportunities. Objectives one and two were met by employing research-based data in a two-stage screening process. First, the universe of available crops (nearly 7000 as listed in the USDA Nutrient Data Laboratory nutritional database) was narrowed to twenty candidate raw crops calculated to possess a weighted, unit-less, four-component "formulation potential index" value equal to or greater than NFDM. Next, consulting authoritative texts and reference information and employing information therein in calculating a weighted, unitless, seven-component "crop potential index" revealed that four crops (teff, chickpea, sesame, and winged bean) may be most adapted to production conditions common to Haiti's Central Plateau. Finally, consulting publically available, coded satellite images and references regarding land use patterns in areas near an existing Nourimanba manufacturing facility and assuming certain levels of crop use (NFDM replacement) and yield suggested that land availability near the facility is unlikely to limit efforts to develop a lower-cost and locally-enriching reformulated version of Nourimanba.

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3:30–3:45 PM

### **Career Exploration of Horticultural Therapy Professionals**

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The profession of Horticultural Therapy (HT) in the United States is considered an emerging profession yet one can find historical reference to the use of gardening and farming in health care in the early days of our country. Limited research has been reported on the profession, including studies

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