



22 Barber Farm Rd.  
Jericho, VT 05465  
[www.JerichoSettlersFarm.com](http://www.JerichoSettlersFarm.com)

**RE: High Tunnel Gantry System for Transport Cart and Automated Row Cover System to Assist Small Farm Production, Scalability, and Profitability**

Dear Diane Abruzzini,

We, Mark Fasching and Christa Alexander of Jericho Settlers Farm, commit to participating in the 2021 NE SARE Partnership Grant with Rigorous, LLC.

We have been operating Jericho Settlers Farm, a year-round organic vegetable farm in Jericho, VT, for twenty years. During this time we have scaled up our hoop house production to nearly 2 acres under cover. We agree with the problems outlined in the Rigorous grant proposal, most notable that the access to affordable, skilled labor is a continuous concern. Managing the many environmental parameters and the many crop care and harvest needs of year-round vegetable production in hoop houses requires considerable staff time and skill. The more of these tasks we can automate to increase labor efficiency the more economically viable our business can be.

As we have scaled up our year-round production, we have been early adopters of new technologies such as in-ground biomass-driven heat systems (wood pellets, dry corn) and proven technologies, such as computerized greenhouse controllers, to automate hoop house ventilation and heating. These technologies have increased the variety, timing, and volume of crops we can grow in all four seasons while reducing labor needs and improving crop quality and production. We strongly support this initiative to design additional high-tech automation into our growing practices to allow us to further scale our sustainable production.

We maintain year-round production of organic vegetables in 19 hoop houses at our farm. During the winter these houses are full of salad greens, which require almost daily uncovering and recovering with remay to protect the crops at night while giving them light and ventilation during the day. The task of moving remay in 19 structures is cold, repetitive, and demanding. We identified this problem and attempted to solve it ourselves through a prototype that inspired this gantry system project.

In addition to remay labor demands, we also spend a lot of time moving trays of seedlings, plant materials, fertilizer bags, and harvested produce up and down through the hoop house walkways. Some tasks include our crew carrying heavy stacks of harvested produce, two trays of transplants

at a time, 50 pound bags of fertilizers, and bins of pruned plant materials. A simple trolley cart would save time during all these tasks while also reducing the level of strenuousness for our crew.

We will collaborate with the Rigorous team in the following ways:

We will provide the space, infrastructure, and many tools needed to build an operational high tunnel gantry system plus two attachments. We will help with the build and installation.

We will provide feedback and input on the system design and usability from our perspectives.

We will demonstrate the system with Diane Abruzzini at winter conferences and on-farm demos.

We will track and provide labor and harvest data which we will share with the Rigorous team for labor analysis comparisons.

We are committed to this project and see the importance of Rigorous' work in developing this open-source tool for modern, sustainable growers.

We are ready to use a tool like this as soon as it is designed and built. We really look forward to incorporating this gantry system into our hoop house production. We strongly encourage NE SARE to support this proposal to help make this tool come to fruition.

Sincerely,

Handwritten signatures of Christa Alexander and Mark Fasching in black ink. The signature for Christa Alexander is on the left, and the signature for Mark Fasching is on the right, with the word "and" written between them.

Christa Alexander and Mark Fasching

Owners/Farmers