

## Hydroponic Farming Colliding with Physical Therapy: Food and Movement are Medicine

### Presenters

Stefanie Bourassa PT, DPT, CSCS

Christian Heiden

### Instructional Level

Basic

This presentation falls into the following category:

Diversity, Equity and Inclusion

### Course Description

An overview of hydroponic farming and how it can be utilized to supply nutritious food to underserved populations and where farming can collide with physical therapy to assist with motivation and rehabilitation. Food is medicine and movement is medicine. An innovative way to combine the two together to help individuals recover from injuries, improve lifestyles, and provide opportunities for development of skills and value.

### Learning Objectives

1. Define Hydroponic Farming and how it can be implemented in communities
2. Demonstrate the collaboration and innovation that effects change in quality of life for individuals receiving physical therapy services
3. Understand and implement strategies across all settings to use hydroponics in a physical therapy plan of care

### Key References: Minimum of 5 current references

Freudenberg, N., Goldrick-Rab, S., & Poppendieck, J. (2019). College students and SNAP: The new face of food insecurity in the United States. *American Journal of Public Health, 109*(12), 1652-1658.

Sun, Y., Liu, B., Rong, S., Du, Y., Xu, G., Snetselaar, L. G., ... & Bao, W. (2020). Food insecurity is associated with cardiovascular and all-cause mortality among adults in the United States. *Journal of the American Heart Association, 9*(19), e014629.

Mozaffarian, D., Fleischhacker, S., & Andrés, J. R. (2021). Prioritizing nutrition security in the US. *JAMA, 325*(16), 1605-1606.

Xu, Z., Elomri, A., Al-Ansari, T., Kerbache, L., & El Mekkawy, T. (2022). Decisions on design and planning of solar-assisted hydroponic farms under various subsidy schemes. *Renewable and Sustainable Energy Reviews, 156*, 111958.

Wang, X. OPTIMIZE FLOWS IN HOSPITALS BY URBAN FARMING.

### Speaker 1 brief bio:

Stefanie Bourassa is a Doctor of physical therapy and the site supervisor for the Center for Musculoskeletal Health at Hartford Hospital, as well as the sports medicine clinical program leader. She works with community members recovering from orthopedic and sports medicine injuries as well as prevention of those injuries by providing physical therapy, movement analysis, research and coordination of holistic care with other disciplines.

Stefanie knows that the physical therapy profession and the association work together towards the mission and vision statements both at the local state chapter level and at the national level.

Stefanie started as a physical therapist in the state of Connecticut in 2007, starting in private practice for 5 years before moving to the outpatient hospital setting in 2012 prior to that she was a student member who attended National Student Conclave. She became more involved with the Connecticut Chapter in 2015 with appointment to the Board of Directors initially she started with the programming committee and then public policy committee. Through her growth within the Board, Stefanie has been at the lead of many of the successful changes and growth within the scope of practice and profession in our state level. The team successfully implemented the change of the make-up of Board of Examiners, defended our stance on dry needling as a modality for physical therapist and physical therapist assistant utilization, and the growth of physical therapy role in the campaign to fight the opioid epidemic. She has participated in the State Payment and Policy Meeting in Washington DC, as well as yearly attends the annual conference. While leading her team, they were recognized within their own institution as well as by colleagues within the American Physical Therapy Association's Connecticut State Chapter, as team of the year in 2018. Through her work, she has presented on the national level on orthopedic conditions, but also on the holistic approach to care. Stefanie has experience with applying for and garnering grants to help support the profession and research.

Stefanie is also a certified strength and conditioning specialist, is recognized as a functional movement specialist and is working towards board certification in sports medicine through the APTA. She has been awarded the Gold Medal Manager Award through Hartford Hospital, being recognized for leadership skills and her ability to coach and mentor others. She is also a coach and unified partner for the Special Olympics of Connecticut Enfield Stars team for bowling, basketball, and golf, and in the past soccer and softball also volunteers time with the Enfield High School girl's soccer team. She acts as a Clinical Instructor for the PT and PTA schools within the state of Connecticut as well as many other schools within the North East.

Stefanie holds a Doctorate degree in Physical Therapy from Russell Sage Colleges in Troy, NY. She also holds a Masters' in Science degree in Physical Therapy from the University of Hartford as well as a baccalaureate of science in Health Sciences from the same University. She was a member of the women's soccer team during her undergraduate studies, and was recognized on the All- American Academic team during her 4 year collegiate career.

#### Speaker 2 brief bio

Christian Heiden is a recent graduate of the University of Connecticut with an B.S. in Applied and Resource Economics with a concentration in International development. Christian has experience in leadership and coordinating groups with a wide range of ages and skill sets. Self taught in hydroponic technology and design, Christian, since his Eagle Scout project in 2016, has been leading Levo's team in the U.S. and internationally in the design and implementation of hydroponic farming and has overseen Levo's product development and training since its start in 2016.