



# **The RTT Collaborative**

**in rural health professions education and training**

*Growing our own...together*

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AUBURN AND RUMFORD, MAINE

MAY 15-17, 2019

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# The RTT Collaborative



The RTT Collaborative  
In Rural Health Professions Education & Training  
“Growing Our Own...Together”

<https://rttcollaborative.net>



STUDENTS



ADMIN & FACULTY



COMMUNITY OF  
STAKEHOLDERS

# A special thank-you to our meeting sponsors!

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## Maine Medical Association







A special thank-you to our meeting sponsors!

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Research in Rural Health Professions Education and Training  
Pre-conference Design and Dissemination Studio

[www.ruralprep.org](http://www.ruralprep.org)

# Rural PREP Rounds

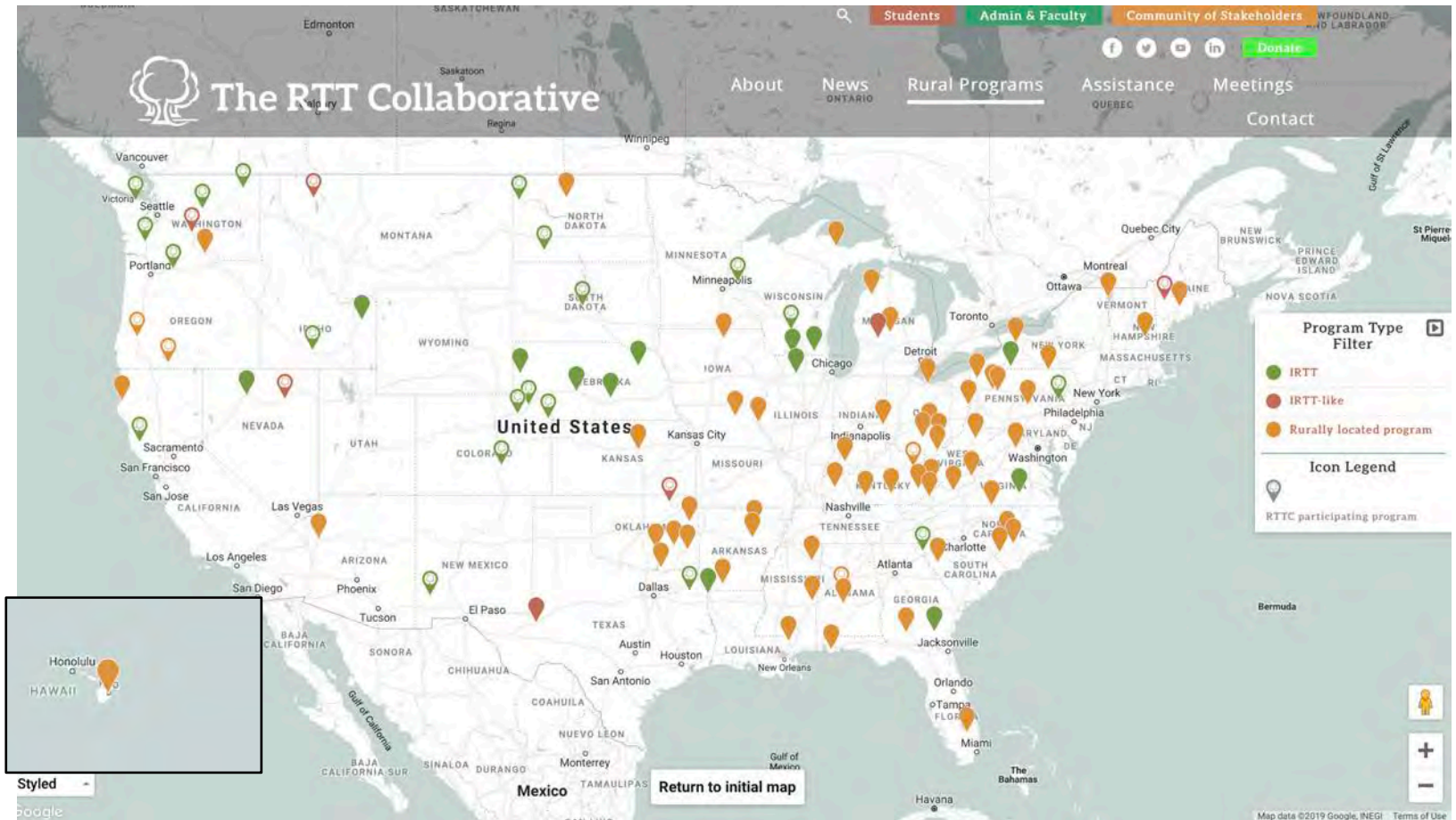
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- ❖ Please give us your suggestions for topics and speakers for either **Rural PREP Grand Rounds** or our **Rural PREP Professional Development Webinars** and receive a \$25 Amazon gift card if your topic is chosen! See Dawn Mollica at the registration desk for details.





# Visit our interactive map of rural Family Medicine residencies!



<https://rttcollaborative.net/rural-programs/residency-map/>



# Our Participating Programs

Participating Program Map



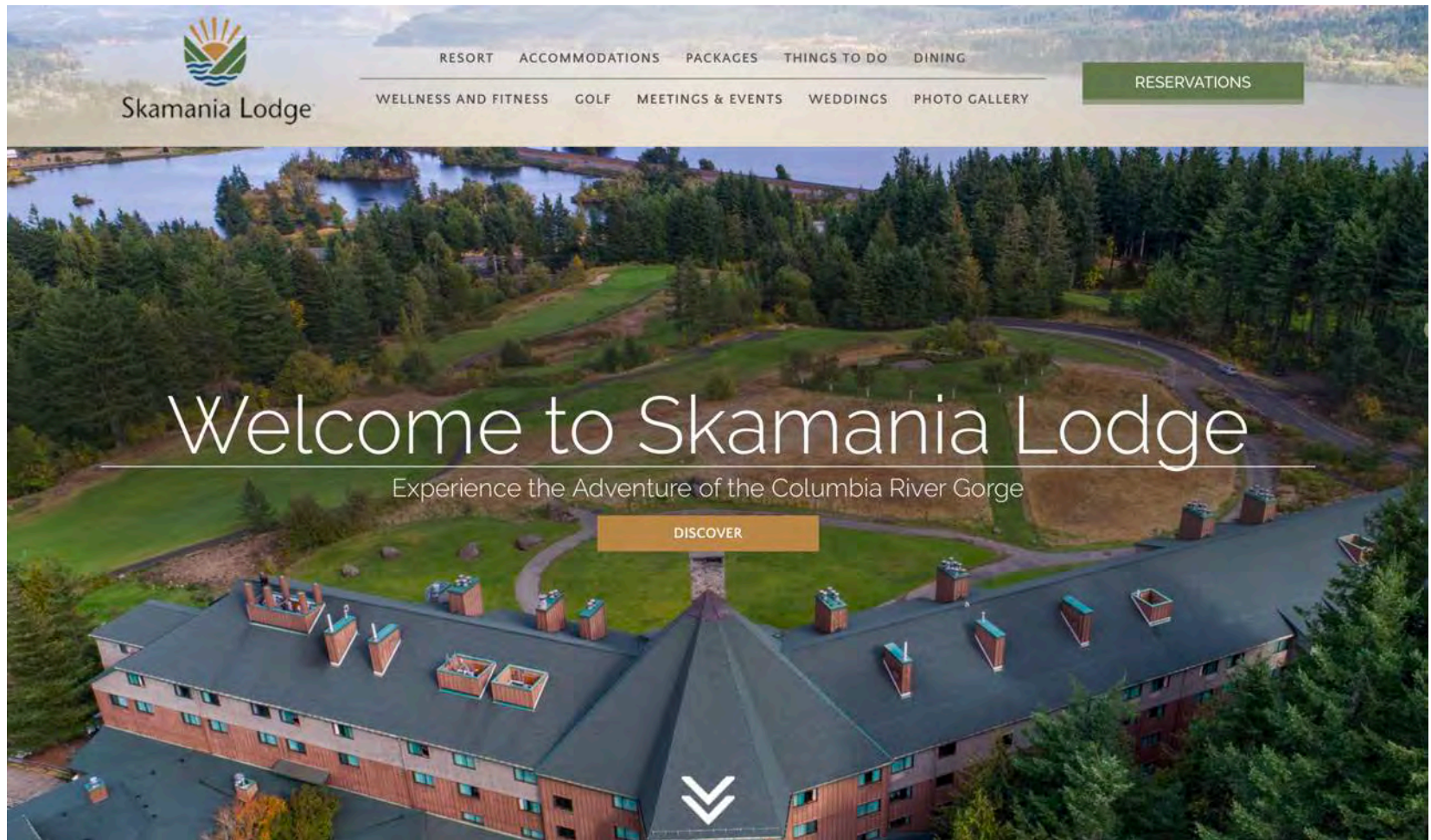


# Welcome!

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- ❖ 91 Registrations
- ❖ 25 States (Maine – 14; Wisconsin – 11; Colorado - 8; Washington - 7; Ohio – 6)
- ❖ 28 of 44 RTT Collaborative Participating Programs, representing active and developing rural programs in medical school and residency
- ❖ 25 non-physicians
- ❖ 7 resident physicians and 6 students





THE RTT COLLABORATIVE MEETING 2020  
HOSTED BY THE RURAL OREGON PROGRAMS  
APRIL 15-18, 2020

# Announcements

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- ❖ Please register if you have not already done so
- ❖ WiFi Code for Meeting: **Thefalls19**
- ❖ Post on social media with the hashtag **#RTTCAM19** or by tagging **@RTT\_Collab**
- ❖ Please send smart phone pictures of our meeting to Dr. Longenecker by text (937-539-7135) or email ([longenec@ohio.edu](mailto:longenec@ohio.edu))
- ❖ Win a \$25 Amazon gift card with a usable idea for Rural PREP Rounds – See registration table

# Announcements

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- ❖ NIPDD Scholarships open – Visit <https://rttcollaborative.net/news/story/nipdd-scholarships-2019-2020/>
- ❖ Rural Recognition – Get credit for the percentage of rural graduates from your program! <https://rttcollaborative.net/rural-programs/>



# Congratulations to Our Photo Contest Winners!

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- ❖ 1st Place – Ash Sampath, Columbia, MO
- ❖ 2nd Place – Vickey Haller, Athens, OH
- ❖ 3rd Place – Amanda Castillo, Silver City, NM
- ❖ Honorable Mention – Benjamin Hammer, Uniontown, OH
- ❖ Honorable Mention – Tony Blankers, Twin Falls, ID



Honorable Mention – Tony Blankers, Twin Falls, ID



Honorable Mention – Benjamin Hammer,  
Uniontown, OH





**3<sup>rd</sup> Place – Amanda Castillo, Silver City, NM**





**2<sup>nd</sup> Place – Vickey Haller, Athens, OH**



**1<sup>st</sup> Place - Ash Sampath, Cape Girardeau, MO**



# Defeating Parkinson's Disease: A Goal-Oriented, Non-Contact Boxing Program in Southeast Missouri

Photo by Ash Sampath



# THE EFFECTS OF NON-CONTACT BOXING ON NON-MOTOR FUNCTIONS OF PARKINSON'S DISEASE



Ashwath Sampath B.S, Danny Rees, Steven Douglas MD, Raghav Govindarajan MD



## Purpose

Our aim was to assess the needs of Parkinson's Disease (PD) patients in a rural community and work to improve their non-motor symptoms through

- A retrospective chart review of PD patients in rural southeast Missouri
- Creation of a goal-oriented, non-contact boxing program
- Creation of a referral network to a movement disorder specialist (MDS)

## Background

Parkinson's disease (PD) is a progressive neurodegenerative disorder that affects one percent of Americans older than the age of 60.<sup>1</sup>

An internal retrospective chart review found 76 of 78 (97.4%) PD patients in rural southeast Missouri were not diagnosed or managed in accordance to American Academy of Neurology (AAN) guidelines and only 2 (2.6%) patients were followed by a MDS.

The objective of this project was to improve the management of PD through a multifaceted approach. A key part of the initiative was the creation of a goal-oriented, non-contact boxing program. Previous studies have demonstrated that exercise provides short-term and long-term benefits to PD.<sup>2</sup>



## Methods

This study was part of a service-learning project through the rural track clerkship program at University of Missouri School of Medicine.

Recruits were identified through two sources:

- 1) Medical professionals who see patients with PD, and
- 2) Word of mouth in the PD community.

Patients attended a minimum of two boxing sessions each week for 4 weeks. The 60-minute sessions included a variety of strength, agility, balance, and sequential coordination exercises. Outcomes were measured initially and at 4 weeks. Outcomes assessed both motor and non-motor function and included gait velocity, cadence, stride length, and Unified Parkinson's Disease Rating Scale (UPDRS). In addition, a neurologist reviewed the patients' medical records and a referral to a MDS was offered to each patient.

## Acknowledgments/References

Special thanks to Rebecca Douglas for collecting data, Monica Kearney PhD for advice on exercises, and numerous volunteers.

1. Gazewood JD, Richards DR, Clebak K. Parkinson Disease: An Update. *Parkinson Disease*. 2013;87(4):7.

2. Li F, Harmer P, Fitzgerald K, et al. Tai Chi and Postural Stability in Patients with Parkinson's Disease. *N Engl J Med*. 2012;366(6):511-519. doi:10.1056/NEJMoa1107911

## Results

- 3 patients completed the entire 4-week pilot study
- Pre- and post-UPDRS scores for each patient showed improvement in all four areas (I: Mentation, behavior, and mood, II: Activities of daily living, III: Motor examination IV: Complications of therapy)\*
- A non-contact boxing program was established in Cape Girardeau, MO with 10+ individuals
- A referral network to MDS was established

## Change in Outcomes

Patient	1	2	3
Demographics	84M	67M	72M
Gait Speed (m/s)	1.16 to 1.30 (+13%)	1.06 to 1.11 (+5%)	.86 to 1.00 (+17%)
Cadence (steps/s)	1.67 to 1.68 (+1%)	1.55 to 1.66 (+7%)	1.28 to 1.31 (+2%)
Stride Length (m)	.69 to .77 (+12%)	.68 to .67 (-1%)	.67 to .77 (+14%)

## Discussion/Conclusion

- Management of PD in rural southeast Missouri is poor due to the inability to adhere to AAN guidelines
- A sustainable, streamlined approach was established to manage patients with PD
- Currently the program is comprised of 15+ participants, university faculty, and volunteers
- Further studies will determine the effectiveness of specific exercises, success of MDS referral network, and improvement in a PD patients' quality of life.

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