

Welcome to the 12th Annual MAVES

3 May 2020



Thank YOU, 2020 vendors, for your support!!

During the breaks, please visit our supporting vendors in their breakout room through the CHAT function and be entered into a raffle for Amazon gift cards!

BOEHRINGER®

PLATINUM SPONSORS

Caring for Lives through Innovation, Quality and Service

LivaNova
Health innovation that matters

Spectrum Medical

TERUMO

Invosurg **SILVER SPONSORS** **Abbott**

*"TOO MANY COOKS IN THE KITCHEN?
WHO IS OPERATING THE XVIVO SUPPORT SYSTEM?"*

Mid-Atlantic VAD & ECMO Symposium
May 03, 2020



XVIVO

- A system utilized to provide additional evaluation time of marginal donated lungs.
- Utilizes a proprietary STEEN solution to perfuse the lungs.
- Uses the Cardiohelp and Hamilton C2 Ventilator.
- Evaluation period of 4-6 hours.

XVIVO CONSOLE





TRANSMEDICS

- Works with donated hearts, lungs or livers.
- Monitors itself and adjusts parameters as needed to provide a proper physiological environment
- “The system enables full functional, biochemical and metabolic assessment of the organ”¹

1. TransMedics, Inc. http://www.transmedics.com/wt/organ_care.html

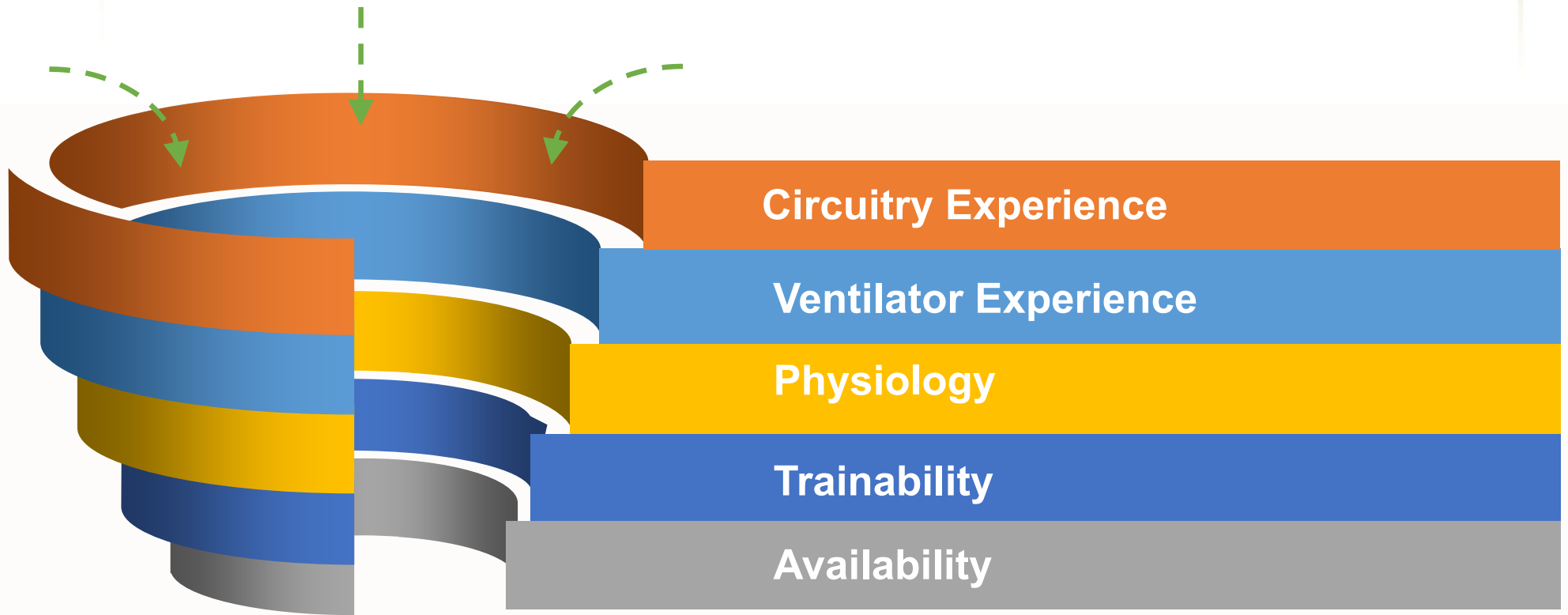
TRANSMEDICS CONSOLE & PLATFORMS



CARE PROVIDERS



CARE PROVIDER SKILLS



BIG FIVE PERSONALITY FACTORS

Conscientiousness

Extraversion

Neuroticism

Agreeableness

Openness to Experience



WHAT MAKES A GREAT TEAM

- “Successful teams were characterized by higher levels of general cognitive ability, higher extraversion, higher agreeableness, and lower neuroticism than their unsuccessful counterparts.”³

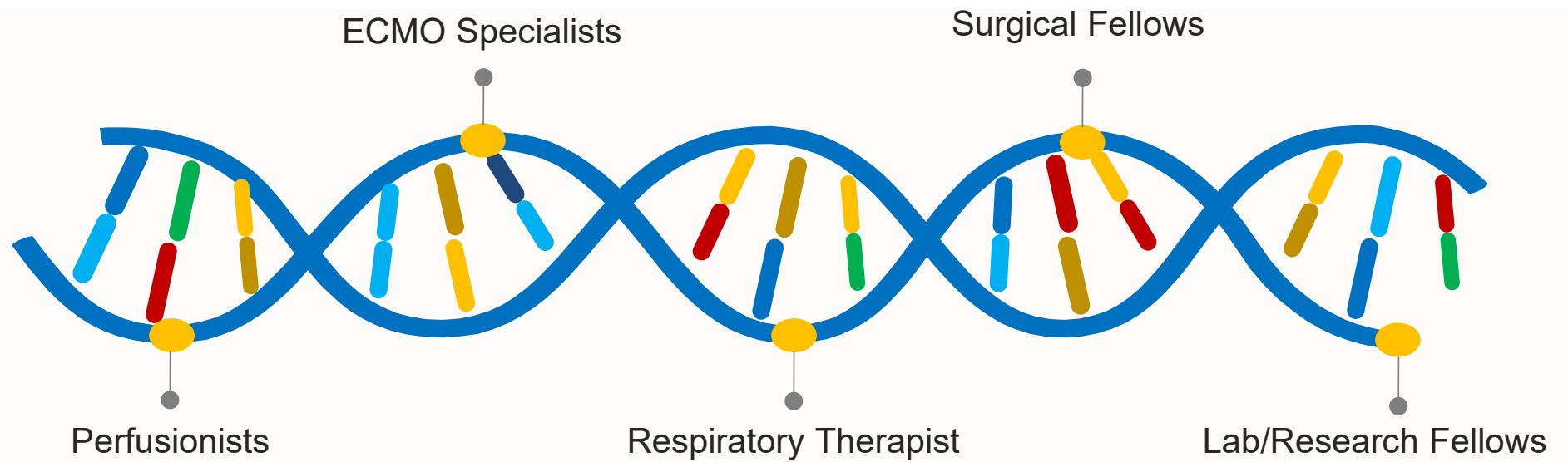
3. Kichuk, S., Wiesner, W. 1997. The Big five personality factor and team performance: implications for selecting successful product design teams. *Jour. Eng. Tech. Mgmt.* 14(3-4), 195-221.
[https://doi.org/10.1016/S0923-4748\(97\)00010-6](https://doi.org/10.1016/S0923-4748(97)00010-6)

TEAM MEMBER INVOLVEMENT

- This technology blends the expertise of several different medical fields.
- Is this becoming the new “Turf War” amongst these various specialties?



POTENTIAL CARE PROVIDER POOL



CARE PROVIDER

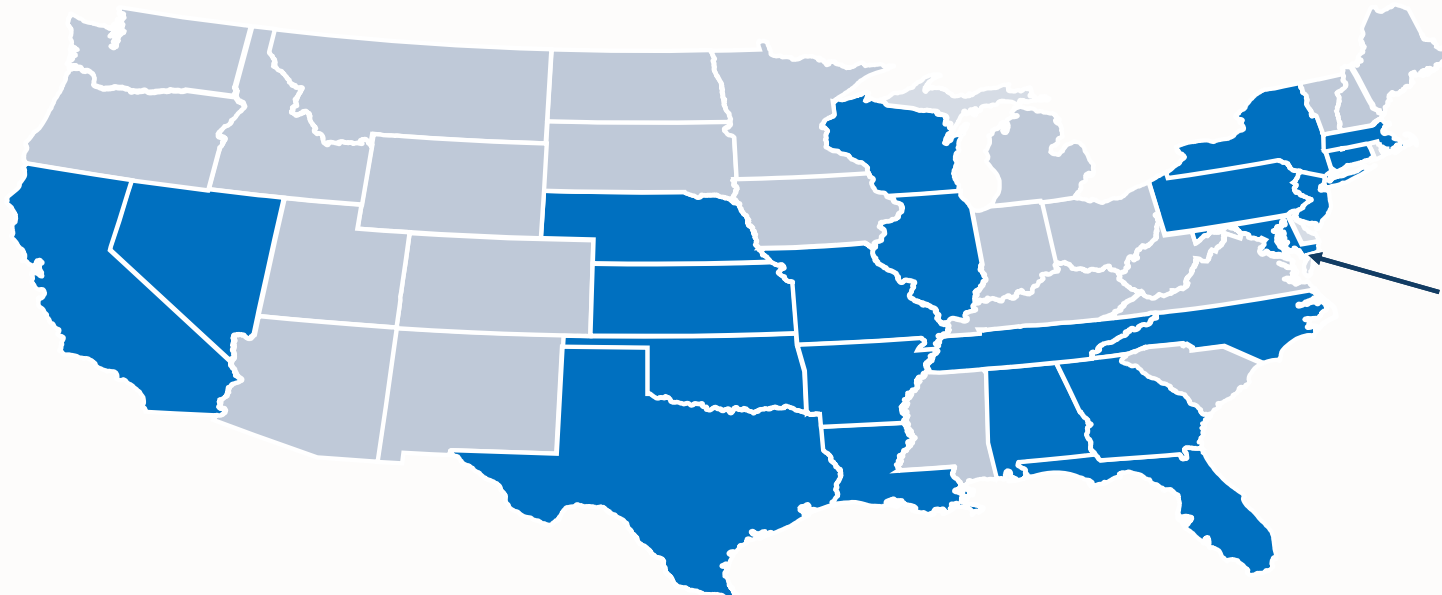
- Lab/Research Fellows
 - Work with technology in research, pushing the edge of this therapy.
 - Familiar with physiology.
- Surgical Fellows
 - Already go on procurement, physiology experts.
 - Would need training on operating equipment, though know the theory of ECMO and vent management.
- RTs & Transplant/Procurement Coordinators
 - May go out on procurement, knowledge general physiology (not as much about bypass phys.).
 - Would need device training.

PERFUSION

- This procedure is recognized by the American Board of Cardiovascular Perfusion.
- For 2020, the ABCP now awards 1 case credit (4P) for each procedure performed by a Perfusionist.²
- Can remain a certified Perfusionist by performing 40 XVIVO or TransMedics lung or heart procedures.

CARE PROVIDER

- Twenty-two states now require perfusionists to register as Licensed Practitioners (LP).



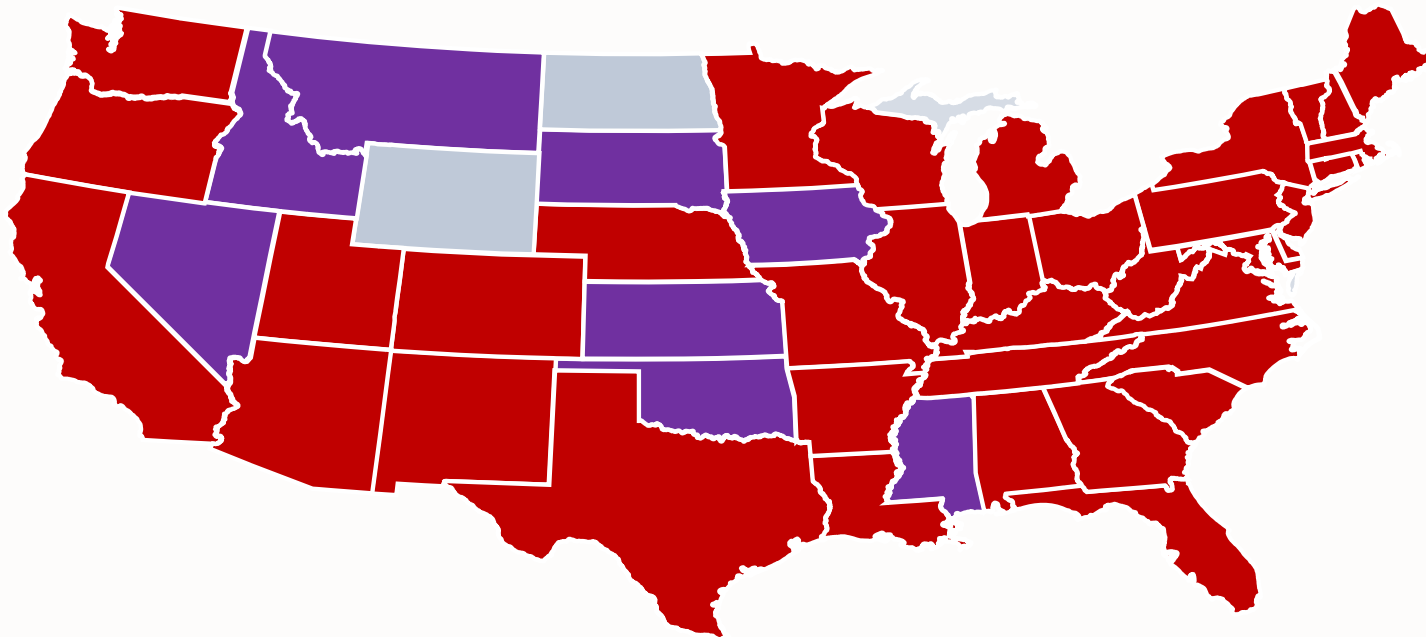


ECMO SPECIALISTS

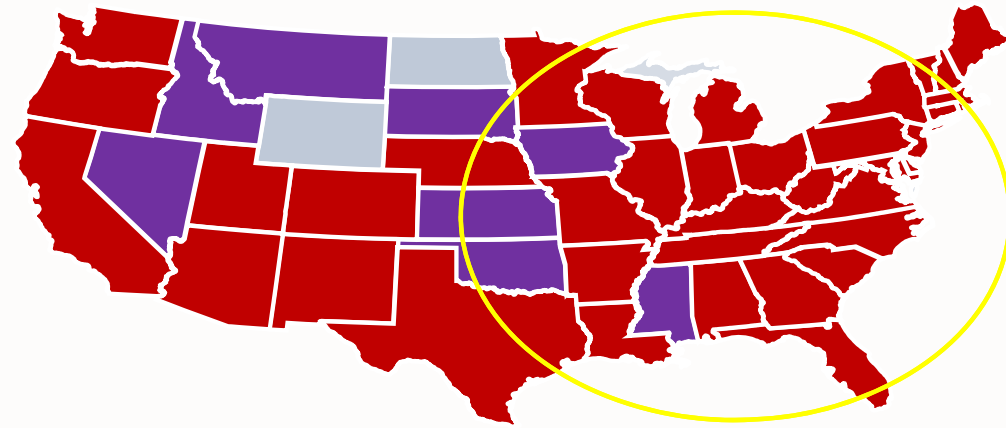
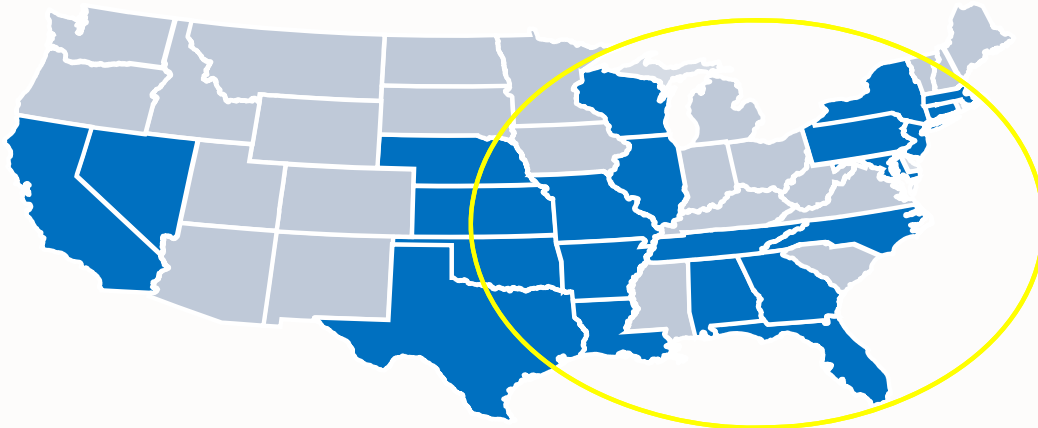
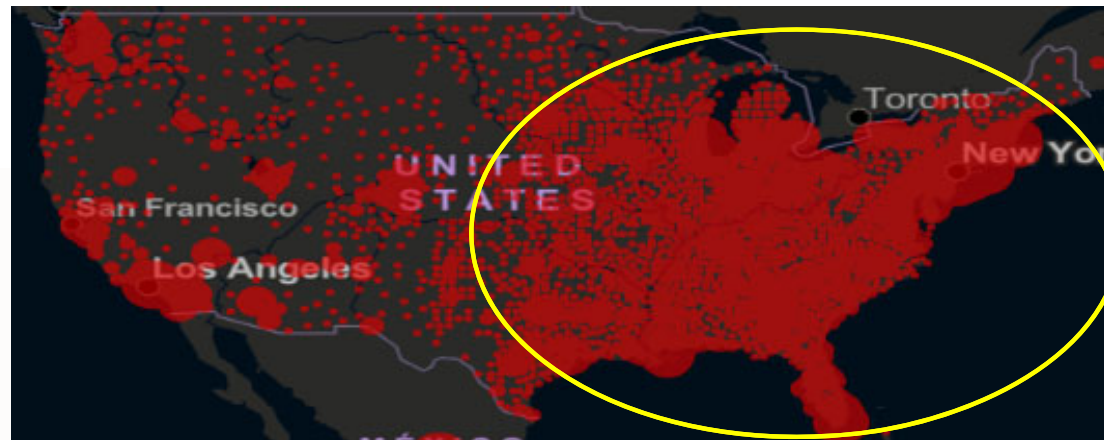
- ECMO Specialist Team at UVA.
 - Made up of RNs, RTs and Perfusionists.
 - Dedicated staff, not pulled from other depts.
 - Extensive training program.
- Perfusion team backs up ECMO team.
 - High census.
 - Initiations (respond in case CPB is required).

ECMO SPECIALISTS

- States with ELSO Centers of Excellence

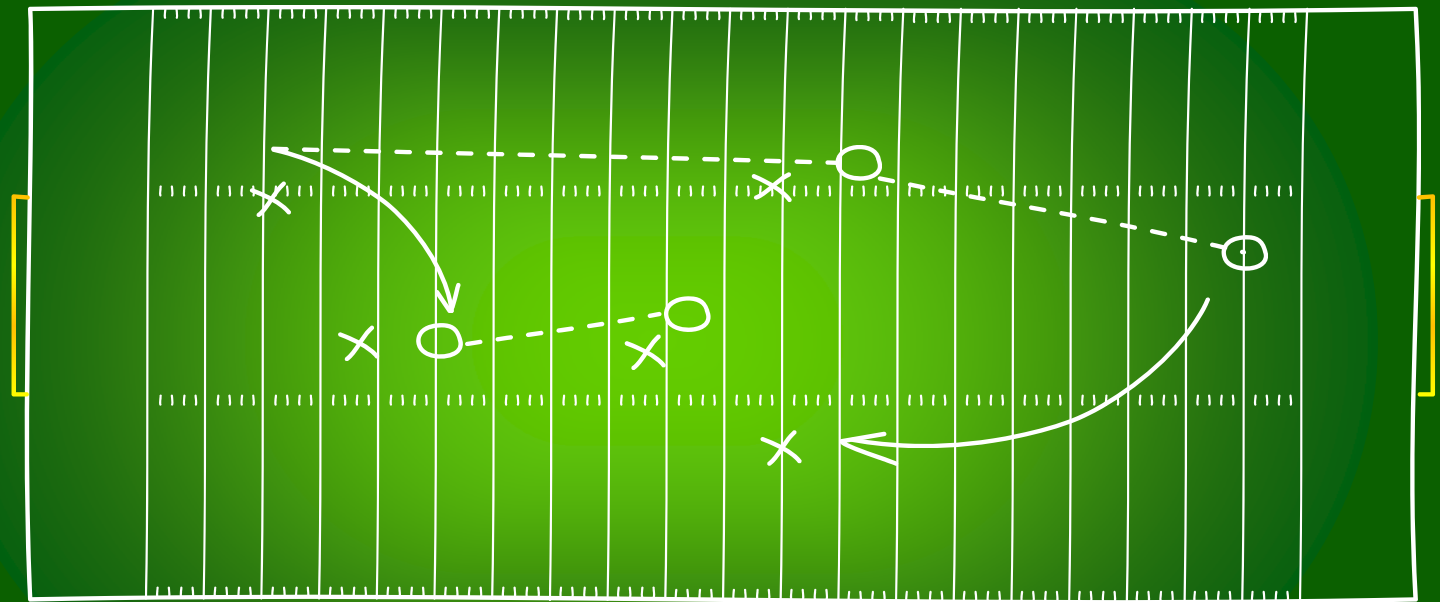


*COVID-19 DASHBOARD BY THE CENTER FOR SYSTEMS SCIENCE AND ENGINEERING (CSSE)
AT JOHNS HOPKINS*



<https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>

UVA's Game Plan





SO WHO SHOULD BE THE COOKS?

- Look for the team with the skills that best fit the scenario.
- Great talent can be found in many fields.
- Leads to stronger clinical outcomes.
- A combination of talent may lead to the best outcomes.

THE UNIVERSITY OF VIRGINIA EXPERIENCE

- ECMO Specialists operate the XVIVO system.
 - In house 24/7 ECMO team.
 - Familiar with the vent (RT or ICU RN).
 - Highly interested in learning and improving the process.
 - Core group picked to work with the system.
- Surgical Fellows trained on the TransMedics System.
 - Training through the vendor.
 - No need for additional personnel on flights.
 - Continuity of care from OR to OR.



THE UNIVERSITY OF VIRGINIA EXPERIENCE

- Why not the perfusionists?
 - Not in-house 24/7.
 - Staff loss during the day.
 - Most do not have experience with ventilators.
 - Call team would be preparing for the transplant.



CONCLUSION

Looking for the best fit for any venture identifies qualified talent and builds strong teams.

ECMO Specialist have proven to be an excellent choice for XVIVO therapy.

The TransMedics device is utilized well by the traveling medical staff.

Flexibility allows Perfusion to fulfill other commitments; O.R. daily schedule or on-call emergencies.