The semifinals of the 2021 AMA Research Challenge—the largest national, multispecialty research event for medical students, residents and fellows, and international medical graduates—takes place Oct. 21–23.

Ahead of the big event, participants may be wondering what it takes to bring home a grand prize of $10,000, sponsored by Laurel Road. Doing that first requires getting through the semifinals, which are voted on by students, residents and fellows, and physicians. Event registration is open to anyone, and AMA members can vote on which entries they think are best in class.

From this group of posters—expected to be more than 700—a group of AMA members, medical students, residents and fellows will be selected, with the top five poster presentations from the event being presented before a panel of judges on Dec. 8.

If last year’s AMA Research Challenge version of the event is any indication, the final group of posters is likely to represent the innovative thinking needed to drive medicine forward. The 2020 finalists covered a wide variety of topics, including the effects of electronic cigarettes, ventilator access during the pandemic and emotional intelligence in relation to burnout.

What does it take to create a winning poster? We asked Vineet Arora, MD, MAPP, one of the four judges for the 2020 AMA Research Challenge to offer her insight. In addition to judging the contest, Dr. Arora is assistant dean for scholarship and discovery at the University of Chicago Pritzker School of Medicine.

**Research that resonates with you**

Physicians aren’t experts in every aspect of care, so it’s very difficult to find something that will resonate with every judge, Dr. Arora said.
“Any topic can resonate as long as the relevance is explained well,” she said. “This is an important skill for all scientists, no matter what kind of science you are doing—bench to bedside to community. COVID-19 is a perfect example of how all aspects of science—from basic virology to community and global health deployment of vaccine and public health interventions—are critical and relevant. So, the key aspect is whether and how the relevance is communicated to the audience.

Learn how you can make your poster?presentation stand out at a conference.

Show that your work matters

Practical application is key to any effective body of research.

“I always look for rigor and impact in research,” Dr. Arora said. “I do want to say one caveat for student research is that often the rigor and impact is defined by the mentor so I also want to think about the rigor and impact of the student on the work. Can the student tell me what they did rigorously and how it was impactful? That is always impressive.”

Keep your visuals clean

When it comes to poster presentations, space is limited. One common trap some students fall into is overloading information.

“I subscribe to the POSTER format, which I modified from an old paper that I saw,” she said.

The POSTER acronym stands for:

- Plan ahead.
- Organize visuals.
- Select main message.
- Tell the story.
- Eliminate unnecessary text.
- Rehearse.

“If you include that method in your preparation, you can see when there is a too-much-information problem in your presentation,” Dr. Arora said. “It is important to review for just the text you need.”

Learn more about the winning projects from the 2020 AMA Research Challenge.
Your narrative needs to make sense

The audio portion of your presentation, the words you are speaking, need to match your research. As a poster presenter you are, in essence, telling a story.

“People are auditory or visual learners but it can be dissonant to hear a presentation that does not match the visuals and vice-versa,” Dr. Arora said.