Judges for AMA Research Challenge discuss vital role of research

Watch the AMA's daily COVID-19 update, with insights from AMA leaders and experts about the pandemic.

Featured topic and speakers

In today’s COVID-19 update, the AMA speaks with the three judges of the AMA Research Challenge. The winner of the challenge will be selected from five finalists on Jan. 13.

The event will showcase the research of five medical students and their projects. They were top-voted participants from among more than a thousand entries sent by medical students, residents and international medical students to the AMA Research Symposium in December 2020.

Find out more about the AMA Research Challenge finalists.

Learn more at the AMA COVID-19 resource center.

Speakers

- Howard Bauchner, MD, editor-in-chief, JAMA scientific publications
- Mira Irons, MD, chief health and science officer, AMA
- Clyde Yancy, MD, MSc, vice dean, Diversity and Inclusion, Feinberg School of Medicine

Transcript

Unger: Hello. This is the American Medical Association's COVID-19 update. Today we're talking about the AMA's first ever research challenge and the important role that research plays in health care, both during and post pandemic. I'm joined today by three of our challenge judges, Dr. Howard Bauchner, editor-in-chief of JAMA and the JAMA network in Chicago, Dr. Mira Irons, the AMA's chief health and science officer in Chicago and Dr. Clyde Yancy, vice dean of diversity and inclusion,
professor of medicine and medical social sciences and chief of the division of cardiology at Northwestern University's Feinberg School of Medicine in Chicago. I'm Todd Unger, AMA's chief experience officer in Chicago.

Unger: The AMA's first ever research challenge premiers on YouTube on Wednesday, January 13th. I'm excited to moderate the event, which will showcase the research of five medical students and finalists whose projects were voted on during our research symposium in December. The finalists emerged from over a 1,000 initial entries submitted by students, residents and international medical graduates across the country. I know we can't share the specifics of the students' presentations, which will be aired as part of the event, but looking at the topics covered, we have three that address COVID, one that deals with student burnout and another that addresses the effects of eCigarettes.

Unger: Dr. Irons, let's talk first. What do you think about these topics reveal about the priorities of the next generation of physicians? And what do they mean from a public health perspective?

Dr. Irons: Well Todd, I think what they say to me is that we're in good hands, looking to the future. The fact that we got a 1,000 abstracts to review in the middle of a pandemic when a lot of us were really worried about how research was going to be conducted over the last year is really amazing. And I just want to thank all the people who reviewed the abstracts to get us to these five. But when I look at these, it runs the gamut from basic and clinical research to implementation science, to ethics, which AMA really has a firm respect for, with the Code of Medical Ethics. And I think all are important. Public health medicine, health in general.

Unger: Dr. Bauchner?

Dr. Bauchner: Well I want to congratulate the 1,000 students who submitted research proposals and ideas and then finished projects and certainly to congratulate the five. I love research. I love reading about research. I missed mentoring more than anything else and so reading through these five, just brought me back to the days of trying to help students with their first research project. I'm not surprised that that three were focused on COVID. It's consumed most of medicine in the world for the last year and it will for the next six months or year. I'm not surprised about that. But the five projects that I looked at are appropriate, interesting, well done and very well presented. You always reflect, could I have done that type of presentation when I was in training at their age? And I doubt it. Congratulations to the five and I'm excited about the entire idea, Todd. I know it came out of your shop. It's a fabulous idea. I think it's a really good thing for the AMA.

Unger: Well, you will get your chance to do some mentoring, Howard, because one of the prizes for all five finalists is something priceless and that is a mentoring session with you, Howard. Thank you very much. It's very exciting. Dr. Yancy, what are your thoughts about what you're seeing in terms of what it indicates to you about the direction of research?

Dr. Yancy: Todd, let me tell you how uplifting it is to have this conversation and how much I applaud
the idea. And if it came out of your shop, big thumbs up because as we wrestle with the pain and the heft and the weight of everything that happened in 2020, is carrying over into 2021, we're looking for those kernels of light to say, "Here is the pathway forward." I am a champion of diversity, but the diversity that's most important is the diversity of thought, Todd. And we look at this array of these five subjects and we recognize that what we accomplished, what you accomplished, was bringing new ideas into consideration. And that's what's so phenomenal.

**Dr. Yancy:** There are two other aspects of this that are very important. If we are to chart a meaningful and productive path forward, we need new discovery. And each of these contributions and I do intend to use the word contributions, represents new discovery. Because that's how we will inform the next iteration of who we are as a medical discipline, as a health care field, as a health equity field. And so I'm really delighted about that.

**Dr. Yancy:** But the third dimension of this, and this is the thing that really ignites and galvanizes my career today. There's nothing more important to me at this phase than launching new careers. Imagine one of these five, one of those 1,000, because of developing a question, generating data and presenting the data, we may have turned on a switch and that person may become an unbelievable clinician scientist, epidemiologist, basic scientist, with an arc of 30 plus years to contribute to our dataset. That's the value of doing these kinds of research challenges. Yes, the information is clever, is curious, but the inspiration is much more important. And that's what I applaud the AMA for doing, inspiring young minds with diverse ideas to really think differently about solutions that we desperately need going forward.

**Unger:** The three of you are making me even more excited about this event. It's interesting, the AMA Research Symposium has been going on for some time in a live venue, tied to our Interim Meeting, but it's one of those things that in its reinvented form using virtual platforms has allowed almost 60% more folks to enter into this and allowed us to do something special with this YouTube presentation of the finalists. Thinking about research, I've heard it in some of your comments already, Dr. Bauchner, I guess it goes without saying, but why is promoting research especially important right now?

**Dr. Bauchner:** Well, people always talk about that kind of three legged stool in health care. The people who deliver care, the people who administrate and then discovery. But they're all intimately linked to one another. And the best example would be what happened within the last year related to the pandemic. Who would have thought that corticosteroids would have emerged based upon a number of clinical trials as the standard of care for COVID-19? Or that data are emerging about monoclonal antibodies? This is all based upon discovery. Some discovery that started in the lab and then moves to clinical investigation. And the truly magnificent success, bringing a vaccine from bench, to translation, to clinical trials in nine months and will likely save millions of lives around the world. No one imagined that that was possible three years ago. The importance of discovery and science and research, it's laid out in the last year.
Unger: Dr. Irons, any thoughts on that?

Dr. Irons: I'll just expand on what Howard was saying about the importance of science. I think the importance of science and evidence and data, the pandemic has been the perfect use case for it. I think we've always taken it for granted. Those of us in medicine I think I've always felt that of course science is important and of course we practice evidence based medicine. And we've seen what happens during the pandemic when people turn away from that. If you just look at drug, Howard talked about corticosteroids, but look, what happened with hydroxychloroquine. Anecdote versus randomized clinical trials. We've seen the effect of that.

Dr. Irons: Look at what's happening now is vaccine dosing. The data support two doses of the vaccine and you have to think really clinically, critically for how you do that. But the last thing I'll say is just look at mRNA vaccines. The fact that they were able to develop these mRNA vaccines so quickly was based on 18 years of research. Eighteen years of research in the basic science labs. And so, to Dr. Yancy's comment earlier, what is starting today, you never know what it's going to end up to be in the future.

Unger: Well, Dr. Yancy, this particular challenge and our research symposium is geared to students, residents and international medical graduates. Why is it so important to get their input and perspectives as we navigate the pandemic in the new year?

Dr. Yancy: Any successful team, any successful team has to have a bench. We've got stars all over the place executing at the top of their game. One name says it all, Fauci. But that's not sufficient. We have to prepare the next generation. We need another group of engaged, insightful, young scientists that have an unquenchable thirst for knowledge and discovery. It's the only way we'll get to the next point. I was smiling as I was listening to Dr. Irons and Dr. Bauchner because our lens really is focused on COVID-19, but you know what, Todd? There's been amazing clinical science that has continued through 2020 that is reshaping how we approach a number of conditions. I'm in the cardiovascular space but discoveries this past year have informed an entirely different approach to taking care of patients with advanced heart disease. That will be with us, regardless of what happens to COVID-19. And we need this kind of information and these kinds of investigators to understand the full breadth of the importance of discovery.

Unger: Well, turning to the challenge, each finalist is going to have an opportunity to present their ideas. What will you be looking for in their presentations to help pick the winner? And what makes research stand out? Dr. Irons, why don't you start?

Dr. Irons: I think I'm looking for curiosity. Asking a question, identifying a question. I'm trying to decide how to answer that question. And also I'm looking for communication, especially in their presentations, because a new finding is only as good as the ability to communicate that. Whether you communicate that in the pages of JAMA or you communicate it to our colleagues and to our patients.
How they answer the question and how they communicate that answer is what I'm going to be looking for.

**Unger:** Dr. Yancy?

**Dr. Yancy:** I'm looking for juice. I want to find that person that's on fire. That just has this desire to pursue science without limitation. Because that tells me that there's real traction there and that person is ready to tackle the next question. And the very best science, Todd, the very best science, whether it's positive or negative, opens up yet another direction for investigation. And to see that juice where someone really is fundamentally engaged and wants to continue to pursue those directions, that's been the single ingredient that every successful scientist has shared. This incredible thirst to understand the answers for this question, the one that follows and the one two steps down the road. I'm looking for the juice.

**Unger:** Dr. Bauchner, what would you say is the thing that you're looking for most?

**Dr. Bauchner:** Well, my training in biostatistics and epidemiology was by a legendary individual named Alvin Feinstein, known to probably Mira and Clyde. And he was relentless. Often not the most pleasant person, but relentless. What is the question? What is the question? What is the question? Why is it important? And what is the answer? And he was relentless in that. At the end, just tell me simply, what is the question you're trying to answer? Why is it important? And what is that answer? And then with respect to the presentation, people often get anxious when they're presenting for the first time and they can speak too quickly. Just a gentle reminder to the person to slow down slightly so that we can all understand them because oftentimes people speak more quickly if they're presenting for the first time. And then I think just to echo what Clyde said, this likely will not be the project that carries them through their career, but what did they learn from the project? And what's the energy that they bring to the research paradigm? That's what carries them into the next phase of their career.

**Unger:** Well, last question, what's the one big piece of advice that you would give to future researchers? Dr. Bauchner, what would that be?

**Dr. Bauchner:** Oh, just ask a question that you want to know the answer to. No one else. Hopefully it will be important. It's not likely to save the world. I know we all have those illusions. It's not likely to save the world, but ask a question that's meaningful to the individual doing the research. Because if you're not interested in it, over time research is hard. It's tough. And if you're not interested in it, it will become a struggle.

**Unger:** Dr. Irons?
Dr. Irons: To build on that. Not only ask the question, but don't accept the answer that this is the way it's done. If you don't think it makes sense. Be critical, if you don't think it makes sense, figure out the answer to that question because you don't know where that's going to lead.

Unger: Dr. Yancy, what's your final thought in terms of the big piece of advice?

Dr. Yancy: Celebrate the fail. For the young investigators, I prefer if you fail. I have learned so much more from understanding why a project wasn't successful. Was it the hypothesis? Was it the methods? Was it the study design? Was it my analysis? You will learn so much more from the fail than from the win. The win may be serendipity, maybe luck, but the fail will be informative so celebrate the fail.

Unger: Well, that is great advice. The three of you are incredibly inspiring and what great judges you'll make. This is going to be an exciting program so make sure to tune in to the AMA Research Challenge on AMA's YouTube channel on January 13th at 7:00 PM Central time. You can go to the ama-assn.org/researchchallenge for more information. Thanks so much Dr. Irons, Dr. Bauchner and Dr. Yancy for being here today and sharing your advice and perspectives. We'll be back with another COVID-19 update shortly. In the meantime, ama-assn.org/covid-19 for COVID resources. Thanks for joining us and please take care.

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