

An Introduction to MedPhys Slam

MedPhys Slam, a science communication competition similar to three-minute thesis, aims to highlight and improve emerging medical physicists' communication with non-specialists.

The rules are simple but challenging. Contestants have three minutes to present their research using no more than three PowerPoint slides. They are evaluated on three equally-weighted categories – comprehension/content, communication, and engagement – by a panel of judges.

The MedPhys Slam competition is open to all students and trainees. A preliminary round of competition takes place at local AAPM Chapter meetings throughout the year (COMP contestants will submit video presentations), and winners of the Chapter competitions compete in the final competition organized by STSC at the 2020 Joint AAPM/COMP Annual Meeting in Vancouver, BC, Canada.

Why MedPhys Slam?

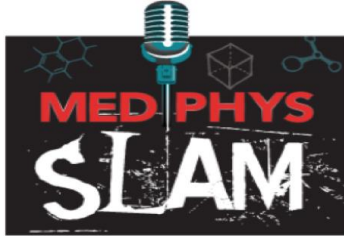
For Students and Trainees: MedPhys Slam provides an opportunity for students/trainees to develop and practice science communication skills vital for sharing their work with an audience consisting of members of non-specialists. Such opportunities are rare in highly specialized and niche fields like medical physics, where researchers typically disseminate their work only to their peers.

For AAPM/COMP: MedPhys Slam also provides opportunity for public engagement in AAPM. At this event, high-quality videos of presentations accessible to non-specialists are recorded. These videos can be shared with a wide audience to communicate who medical physicists are and what we do as well as to help spread the word about exciting research in our field. Additionally, depending on who is invited as a judge, there is a potential to provide good visibility of medical physics and the Annual Meeting to the local community.

For AAPM Chapters: The same benefits can be scaled to the AAPM Chapters and their local events. The ideal chapter would provide mentorship, guidance, and funding support to their Chapter representative and will rally behind their representative in the final competition. MedPhys Slam provides opportunity to jumpstart conversations on public engagement and communication.

How is MedPhys Slam Different from YIS?

MedPhys Slam is different from YIS. At MedPhys Slam, the primary audience is non-specialists, who may have no knowledge of physics or medical physics. At YIS, the primary audience is other medical physicists. To be successful at MedPhys Slam, presenters have only three minutes to present the “what, why, and how” of their research, and as such, must deeply consider what non-specialists need to know about the research. YIS presenters, on the other hand, must present enough of their research methods so that the work can be



replicated. Without MedPhys Slam, everyone from high school students to policymakers will be unaware of the value medical physicists' present in a variety of settings. Without YIS, research will continue, but valuable projects will remain unhighlighted and unacknowledged.

Who Are the Judges?

The ideal judging panel will be a diverse group of individuals, external to the field of medical physics. We aim to have 4-6 individuals on the judging panel of the Annual Meeting Slam, and Chapters are encouraged to follow a similar model.

Potential judges include:

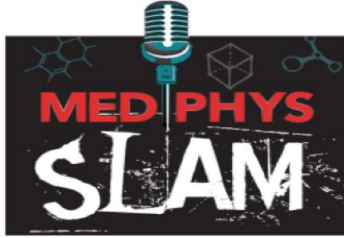
- Local news anchor/reporter
- Local high school physics teacher
- Local university professor (communications, performing arts, physical sciences)
- Local politician (school board, council member, mayor)
- Local musician
- Marketing or communications director from a vendor (this could be one of our typical vendors, but someone who is not a physicist)
- Patient advocate/cancer survivor

Sample Videos

You can view the 2019 MedPhys Slam through the AAPM Video Library (<https://www.aapm.org/education/VL/vl.asp?id=13747>).

Questions?

Direct any and all questions to Catherine Steffel (catherinesteffel@gmail.com).



MedPhys Slam: Rules & Judging Criteria

Who is Eligible?

Individuals must be current Student, Junior, or Resident members of AAPM or COMP at the time of the 2020 Joint AAPM/COMP Annual Meeting. Individuals involved in planning the final MedPhys Slam competition are not eligible. Presentations must be based on your own, original research. Finalists and winners from previous years are eligible to compete provided they still meet all eligibility requirements as a new participant and present **new**, original research.

How do I Enter?

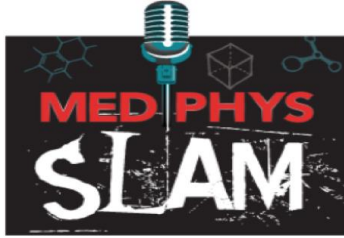
Each AAPM Chapter will be holding a separate competition. International trainees, those who belong to an AAPM Chapter not holding a competition, and COMP trainees enter the competition via video application. The winner of each preliminary AAPM Slam and three to five COMP contestants will be invited to participate in the final competition at the 2020 Joint AAPM/COMP Annual Meeting. Contact your local AAPM Chapter, COMP Student Council representative, or AAPM STSC representative for more information.

Final Live Presentation Rules

- Visuals
 - PowerPoint slides allowed but optional; no Prezi or other presentation formats
 - Maximum of 3 slides, not including title slide generated by STSC
 - Slide material cannot be created by a professional
 - No embedded audio and/or video clips
 - No gifs, animations, or slide transitions
 - Participants will be asked to provide their slides in pdf format
- No additional props are permitted, including but not limited to notes, laser pointers, costumes, musical instruments, and laboratory equipment
- The presenter's contribution to the project must be salient and clearly specified
- Presentations must be given in English. Spoken word presentations (e.g. poems, rap, or song) are not permitted
- Presenters must remain on stage for the duration of their presentation
- Timing will commence from the moment the contestant starts talking. Three (3) minutes are permitted. If contestant goes over three minutes, a time penalty will be applied as follows: -1 point if overtime, plus an additional 1 point penalty per 5 seconds thereafter
- An absolute -10 points penalty will be applied if notes are used
- An absolute -10 points penalty will be applied if more than 3 slides, not including title slide generated by STSC, are used

Prizes

1st place: \$500
2nd place: \$300
3rd place: \$200



Videotaping

The 2020 Joint AAPM/COMP Annual Meeting MedPhys Slam live event will be photographed and videotaped. By entering the contest, you agree to allow the AAPM/COMP to use the resulting photographs and/or video, which may include your image or presentation, in publicity surrounding the contest and/or in other contexts, such as websites, promotional materials, etc.

Direct any and all questions to Catherine Steffel (catherinesteffel@gmail.com).

Judging Criteria

Comprehension/Content (points out of 10):

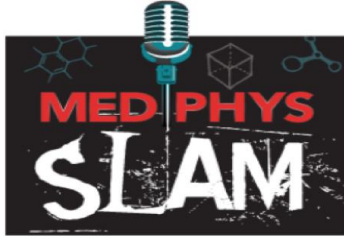
- Did the presentation clearly identify the research question/topic being addressed and its significance?
- Did the presentation help the audience understand the research?
- Did the presenter clearly outline the nature and aims of research?
- Did the presenter clearly indicate what was significant about this research, and how their individual work advances the area of research?
- Did the presentation follow a logical sequence?

Communication (points out of 10):

- Was the thesis topic communicated in language appropriate to a non-specialist audience?
- Did the speaker use sufficient eye contact and vocal range, and maintain a steady pace?
- Did the speaker avoid scientific jargon, explain terminology, and provide adequate background information to illustrate points?
- Did the presenter spend the right amount of time on each element of the presentation – did the presenter elaborate for too long or rush?
- Did the slides enhance, rather than detract from, the presentation; was it clear, legible, and concise?

Engagement (points out of 10):

- Did the presentation make the audience want to know more?
- Was the presenter careful not to trivialize or 'dumb down' the research?
- Did the presenter convey enthusiasm for the research?
- Did the presenter capture and maintain their audience's attention?
- Would the audience want to know more about the speaker's research?



MedPhys Slam: Chapter Responsibilities

This document outlines the responsibilities of individual AAPM Chapters holding qualification competitions for the 2020 Joint AAPM/COMP MedPhys Slam Competition. Most items are left to the discretion of the individual Chapter. Each Chapter winner must meet the minimum eligibility requirements to compete in the final competition. Please direct questions to Catherine Steffel (catherinesteffel@gmail.com).

STSC Notification of Chapter Representative:

1. Chapters must notify STSC (Catherine Steffel) the name and contact information of the person who will be representing the Chapter at the final competition by June 15, 2020.
2. If a Chapter is unable to meet this deadline, they must notify their STSC Slam representative or the STSC Slam lead (Catherine Steffel) prior to June 1, 2020, or else may forfeit their participant's opportunity to compete in the final round of competition at the 2020 AAPM Annual Meeting.
3. In the event that the winner is unable to attend the annual scientific meeting, the second-place participant may take their place, and so on.

Location:

1. Ideally the qualification competition will be held at the annual Chapter meeting provided this meets the notification deadlines outlined above. The competition can be held as a separate event if it cannot be held at a Chapter meeting.

Pre-screening:

1. Participants must be current Student, Junior, or Resident members of AAPM or COMP.
2. Participants must present on their own, original research. If participants have competed in a previous AAPM MedPhys Slam, or COMP Science. Spoken. Succinctly., competition, they must present on new, original research and meet eligibility requirements as a new participant.
3. It is left to the Chapter's discretion if additional screening must be conducted (e.g., if too many people apply and Chapter is unable to have everyone give a presentation).

Judging:

1. A minimum of 3 judges is required.
2. Chapters should strive to create a diverse panel of judges that can assess the ability of participants to convey their research to an audience of non-specialists. Suggestions include: high school teachers, local news/media personalities, local vendor marketing executives.
3. Ideal judges are NOT medical physicists; however, it would be acceptable to include one medical physicist on the judging panel as a means to judge the veracity of the presentations.
4. Chapters are free to use our judging criteria (attached) or to establish their own. The final competition will adhere to judging criteria developed by STSC.

Funding:

1. There is currently no funding available from STSC for Chapters to run this event or for qualifying presenters to travel to AAPM.
2. We encourage Chapters to find creative ways to provide support (funding, mentorship, etc.) to their winner as they travel to the AAPM meeting as a representative of the Chapter's membership.

Feedback & Video recording:

1. Presentations at the final competition will be recorded. It is up to the individual chapters if they would like to record their events, but it is not required.
2. Chapters are encouraged to give presenters verbal and written feedback.