

Summarizing Your Research in Just a Few Minutes

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At this year's IS-MPMI eSymposia, poster presenters are strongly encouraged to include a short video to accompany their poster. Although everyone has become familiar with virtual interactions over the past year, many of us have not practiced summarizing our research in a short 3 minute format. However, having a prepared summary that is concise and effective can be extremely useful – not only in virtual settings, but also during in-person interactions (when things get back to normal). I have compiled some tips that I hope will help you as you prepare your research summaries to accompany posters at this year's eSymposia.

Here's a general talk outline that you might find helpful:

1. Intro, your name, who you are - Approx 10 seconds
2. What's the hook? Why should they listen to you and get interested in your research? - Approx 20-30 seconds
3. How will this help the person you are talking to, or what are the main points you want to make? Don't get bogged down in details – focus on the major findings and why they are important. Approx 60-90 seconds
4. Summarize the impact of your work. Why is it important and how will it guide future research? 20-30 seconds
5. Wrap-up and provide contact info and ask if they would like you to contact them, and/or let them know they can contact you. Approx 10 seconds

Some helpful tips for developing your summary:

Your poster will be available for everyone during the meeting on their own time. Therefore, it is not necessary to describe every experiment and result in detail – let the poster do that for you. Instead, take this opportunity to focus on the bigger picture of 'why' you are doing these experiments and what impact they might have. Spend a bit more time highlighting the main research findings.

Know your audience

You may have multiple talks depending on their purpose. It is a good idea to know who you are talking with and what they already know before you start. You don't want to get halfway through your talk and realize that your audience has no idea what a bacteria is, or that plants can get sick from them. Alternatively, you don't want to spend a lot of time introducing plant-pathogen interactions to someone that just published a review paper in MPMI. While you can sometimes make changes 'on the spot', it is always a good idea to have a well-rehearsed talk ready to go for most situations. For poster

summaries at an IS-MPMI meeting, it is safe to assume that most people are familiar with molecular aspects of plant-microbe interactions.

Make it personal

Do not just say why this research is being done, tell them why YOU are doing this research. This will help people relate to what you are doing and helps to feed into the story that you are telling. However, do not take this too far. You only have a couple minutes and people do not need to hear your entire life story. It also helps to have a 'hook' right at the beginning (e.g. a mind-blowing statistic or surprising fact) that will help get your audience interested in listening to what you say.

Be clear and concise

You only have a few minutes to describe everything, so eliminate language that does not focus specifically on the story that you are telling. If you find yourself struggling to get your talk to around 3 minutes, think about what your audience *needs* to hear in order to remember your story. Your script (see below) will be helpful in highlighting essential language and removing the extra stuff.

Eliminate jargon (important for a general audience)

You are familiar with many terms that we use like a second language in MPMI such as hypersensitive response, effector, necrotroph, Arabidopsis, and Nicotiana, that even well-educated scientists might have a hard time understanding if they are not familiar with your area of research. Even relatively simple scientific terms like nucleus, receptor, molecular, kinase, membrane, and expression may not be appropriate to use when talking with someone that has not looked at a biology text book since secondary school. Avoid terms like these at all costs, unless you properly describe them to your audience. A good way to do this is to...

Use analogies

Analogies help describe something complicated. It would be a great idea to have one or two 'ready-to-go' analogies that you can use to help explain something. Try to come up with some common situations that might be similar to what you're trying to describe. When talking about pathogenic interactions, your analogies may tend to be violent because, well, the interaction is actually quite violent. I like to use the analogy of a burglar (the pathogen) trying to break into your house (plant cell). The burglar has a toolbox (effectors) that help them break in and steal your stuff. To counter this, your house has walls (cell wall), locks, alarms (R proteins), or an auto-destruct system (HR) that help to defend against the burglar. (I don't know of any houses with auto-destruct systems, but you get the idea.)

Keep in mind that some analogies might not be understood by everyone. Similar to 'jargon', be mindful of your audience. Analogies that involve current events, religion, or regional culture, for example, may not be understood by everyone.

Be aware of what your body is doing

Twirling your hair, scratching your nose, constantly shifting your weight, looking at the floor, or running in circles - all of these can be equally distracting when you are trying to keep someone's attention. You want people to focus on what you are saying, not what you are doing.

Write/type a script

It will be critical that you use proper grammar, pronunciation, and speech patterns when you give your talk. This is an important point for everyone, not just non-native English speakers, so don't take this lightly. Think about what it is you are trying to say. What are some important vocabulary words that are needed to describe your research? Practice pronouncing them accurately. What syllables need to be stressed? If it helps, use your script to underline or highlight syllables with the most stress to help you pronounce them correctly.

Pauses... are... GOOD... They can emphasize an important point and help you to slow down and think about what you are going to say next. In your script, work on 'thought groups' and mark the text where you think pauses should go.

A well-rehearsed script will also help you avoid saying 'um', 'ah', 'so...', '...you know', '...right?', etc.

Also, distributing a script along with your video is incredibly important for audience members with visual, auditory, or other impairments. If you can add subtitles to your video – it would also be very helpful.

Do not be perfect

Perfect can be boring and can seem robotic. You want people to know that they are listening to a person. Your goal should be to give a successful talk, not a perfect one. You should definitely practice your talk. A lot. The more comfortable you are with your talk, the more genuine you will seem. Some of you may feel the need to eventually memorize your talk word-for-word. That is okay, but it can sometimes be better to memorize certain keywords or themes so that if you stumble or forget something (which is fine, by the way), it is easier to pick up where you left off.

Recording your video

Using your phone for the recording will likely work just fine. Please make sure the recording is in landscape (longer horizontally than vertically). If you do not have your talk completely memorized, you can use a teleprompting app (like [PromptSmart](#)) to help with the recording (but you might find something else that works too). The free (lite) version of PromptSmart does not allow you to read and record at the same time, but you can use two devices (one to read the script and another to record). You will likely not get it perfect on the first try. In recording some videos of my own, I probably started and stopped 50 times before getting one that I liked. So you may have to find a patient friend if they want to help you record your video.

