

How to Make a Video Abstract  
By The Scientist Videographer  
Runtime: 14:44 min

[How to Make a Video Abstract]

Narrator>>In this tutorial I will show how to create an effective, engaging, and professional-looking video abstract entirely with a smartphone.

[Preparation]

Let's start with preparation. First, identify your key finding or "take-home message" ....something that can be stated in one or two sentences. Your video abstract will be designed around this core idea.

[Story]

Next, decide how you will convey your message. Select a structure that will get the viewer's attention or raise their curiosity. Generally avoid a linear, rigid structure (objective, methods, results, conclusions) and instead tell a story. Here are A few ideas:

[series of images]

You might simply begin with a description of an interesting aspect of your work such as a unique ecosystem or unusual organism.

Or you could start with a question or puzzle and have the answer unfold like a mystery novel. Generate a sense of curiosity that makes the viewer want to know how it will turn out.

Or create a gap in the viewer's mind about the topic by describing what is known and what is not known. Then you can explain how your work filled that gap.

Or you may take a human interest approach and describe what motivated you to conduct the research. Perhaps you are a cancer researcher and lost someone to the disease. Or your work may have been stimulated by a catastrophic event such as a hurricane.

[storyboard and script]

Next, prepare a storyboard and script. A storyboard is a visual sequence of steps describing scenes that will comprise your video. Your storyboard can be created in PowerPoint or a similar application. Here you will decide what footage, interviews, still images, animations, or other media will be used to tell each aspect of your story. Strive to use at least two types of media to make your video more visually interesting.

Also prepare a transcript of your video, which is helpful for colleagues who may not speak your language or who have trouble understanding your accent.

[equipment and software]

You can shoot, edit, and publish your video entirely with a smartphone or tablet that has a camera and that can support movie editing apps for mobile devices. I'm using an iPhone 4 and iMovie for this tutorial.

[smartphone accessories]

Here are some accessories that will help you film with a smartphone: A gorillapod with holder attachment for your phone can be used for stationary filming in your office, laboratory or field. For action footage of yourself and colleagues, an extendible monopod such as iStabilizer works well. You want to use a lapel microphone, but need one designed for use with smartphones along with a compatible extension cable. With this setup, you can easily film yourself demonstrating something in the field or laboratory or film yourself and your coauthors discussing the study findings in an appropriate setting.

[shoot your video]

Next, shoot your video. Film yourself and coauthors explaining your work. Get footage showing methods, instruments and organisms used in your study.

You may want to film activities and scenes from different perspectives to add variety to your video. You can also use still images of plants, animals, soils, landscapes and experiments in montage sequences in your video. Use animations to illustrate concepts and the findings of your study.

[filming tips]

Here are a few filming tips

First, you want to avoid backlighting by not filming your subject in front of a window. Alternatively, block the window and introduce light from the side. If outdoors, avoid filming at midday when shadows are difficult to avoid; instead, film on an overcast day.

Try not to film your subject against a blank wall, blackboard, or whiteboard. Instead, select an interview location with a simple but interesting backdrop and where there are no distracting movements in the background.

Use the rule of thirds to compose your shots. Positioning your subject according to thirds is more visually pleasing, and this approach can provide room for a picture-in-picture.

You can speak directly to the audience by maintaining eye contact with the camera lens or you can use interview-style approach in which the subject looks off camera,

which can produce a more natural or spontaneous effect; it helps to have someone stand off camera and ask you questions. These can be edited out later.

[edit your video]

In this section, I'm going to show how to edit a video abstract with a movie editing app for a smartphone called iMovie.

To demonstrate, I'm going to create a video abstract of a paper I published previously in the journal *Global Change Biology*. I've already got the media files on my phone and I am going to follow a storyboard and script that I've prepared ahead of time.

First, you want to download iMovie from the App Store. You can do a search for it on the app store. And once you locate it, then you can download it and it will appear on your phone screen. And when you tap on it, you will be presented with a screen that looks like this. And all of your projects are listed below and you can scroll through them. To create a new project, tap on the + sign and new project.

And you will be presented with a window that looks like this. The upper panel is the browser window and is where you will view your media and preview your project. The lower panel is the project timeline and is where your media will be dropped to build your video. And the tools you will use are in the smaller boxes along the sides.

First, pick the theme you want for your video by selecting the settings button. And the first one is the default called Modern and it is very clean and simple. If you change the theme, it will then modify the look of the text, the theme music and theme transitions.

Instead of starting with the paper title and citation, I think I will start with a film clip I recorded, in which I talk about the plant community we studied. It will set the stage for the project. To select media, you tap the media browser button, which opens your media browser. Then select video along the bottom and we will then see all the video clips stored in my image library. And we can scroll through them to find the correct one. And so here it is at the top. Tap on it to highlight it in yellow. And we can review it first by tapping on the button on the left. And then when I want to add it, I tap the blue arrow, and it drops into the timeline.

I can review that clip again by tapping the play button and it will play in the timeline. I can expand or contract the clip with the pinch zoom gesture, giving me a wider view of the number of frames in each clip. If I want to trim the clip, then I tap to highlight, then drag one of the handles at the end to the point where I want the clip to stop. And so now you can see that we've got a shorter segment of that initial clip.

Next, I want to add the title of the paper. I'll tap the media button. Then select photos. This opens my photo library. Scroll and then select the image and tap it. It

drops right into the timeline. I'm going to add another photo. Once in the timeline, I can change the timing of the photo by tapping and dragging the handles, the same as for a video clip; and so you can see the duration of the clip is increasing from 4.9 seconds to 12.1 seconds. I can pinch to zoom or drag to a new position or add a Ken Burns effect by setting different positions at the beginning and the end of the clip. And so this adds motion to the photo. To add text, doubletap the clip and a dialog box opens. Select title, then Opening title. Tap in the text box and the keyboard appears. And I'll type in the title of the paper. Select done and then play to preview.

I think I'll add the location of the study to the opening footage, but I don't want the text to appear over the entire clip. So I will split the clip first. To do this, I select the clip and then swipe my finger in a downward motion across the playhead; this is the pink vertical line. Now the clip is split and I can type in the location text on the first segment. I'll select the Middle text option and then tap the text box to open the keyboard. And I'll type in Mississippi River Delta. Note here I can change the volume of the audio on this clip with the scroll bar or mute it altogether by tapping this button. So let's review.

You'll notice that there are these funny boxes between the clips. These are transitions. And the icon shows that the default transition is a cross-dissolve. Double-tap and an information box opens. We see that these transitions are 1 second in length by default but we can change the duration of the transition or we can eliminate it by selecting none. Now the icon will show a vertical line indicating that it is now converted to a cut transition.

Now I want to explain a little bit more about these vegetation types and how this relates to air and sea temperature. So I'm going to use an animation. So I'm going to go back to my video file and select an animation that I've uploaded. And it drops into my timeline. You can find such media in the public domain, for example government sites such as NASA or you can create them yourself.

I need to do a voiceover for this clip. After first practicing, I tap the microphone button and then tap record. It's important to be sure the playhead is situated where you want the recording to begin. There is a 3 second countdown, then the recording starts. When finished, tap the record button again. We then have the opportunity to review, retake, accept or discard the recording. If accepted, the audio file drops into the timeline and shows up as a purple bar. We can doubletap it to adjust the volume.

I will continue to add images of the experiment and data and then record additional voiceovers. I created these images in Powerpoint, saved them as photos and then exported them to my photo library. You can move clips in the timeline by pressing on them with your finger and dragging to a new position; to remove a clip drag it out of the timeline and release. Any action can be undone by tapping the undo button.

A final item that might be added is music. iMovie provides a few jingles. You can also upload other music, but you must have a license for it if the video is to be published.

Tap on your selection and it will drop into the timeline. And it will show up as a green bar.

Now that my video abstract is finished, let's export it. We go back to the marquee screen and tap the share button. From here it can be exported directly to YouTube or to other sites. By sending the file to iTunes, it can then be transferred to my computer.

With the information I've just presented, you should be able to create a pretty good video abstract for a journal article, by yourself, using only a smartphone or a tablet. You should strive to keep it under five minutes in length, but be sure to follow your journal's guidelines in this. It's best to plan for a video abstract while your research is underway so that you can get useful video footage and other necessary media. But as my example shows, you can still make a decent video abstract of a paper after the fact using photo montages, powerpoint slides, or media from the public domain. To see the entire video abstract I used for the demonstration, just click on the link.

I hope you will find this video tutorial helpful. This is Karen McKee, the Scientist Videographer, thanks for watching.