*From Carry the One Radio producer Ben Mansky, August 2019*

Our process has six primary steps:
1. Identify a subject
2. Develop questions
3. Conduct interview(s)
4. Build a story
5. Record narration
6. Produce & publish

**1. Identify a subject**
Before diving into making a podcast, first ask yourself a few questions:
- What am I genuinely interested in?
- Who is my target audience?
- What will they learn from this?

Try writing a mission statement to help yourself clarify what you're trying to accomplish with your podcast (e.g. "igniting scientific curiosity in the general public"). Once you've identified a subject, it's time to reach out to people you can interview about it. Leverage your local network, look for people that you already know are good speakers (check out TED or TEDx talks), and send many, many emails - persistence usually works.

**2. Develop questions**
Make sure to do your research on the interviewee and their work ahead of time. You should go in with a couple of possible storylines in mind (with questions to match), but remain flexible. If it turns out there's something else they'd rather talk about, that will probably make for better audio.

**3. Conduct interview(s)**
We use Sony PCM M-10 handheld recorders, but you can get pretty good-quality audio on something as simple as your phone's default "voice memo" or similar recorder app. The format of the interview will vary greatly based on how produced your final product will be. We often have one main interviewer and one assistant, which helps bring multiple perspectives (and deeper questions) on our interviewees' research. We also try not to react vocally while our interviewees are speaking, as we usually isolate quotes and rearrange them. We get our interviews transcribed by Rev (rev.com) for $1 per minute.

**4. Build a story**
Go through the transcript and highlight quotes you think are particularly exciting. A story should have some action, tension, and a beginning, middle, and end. Our episodes tend to look like:
a) The field as it currently stands
b) Gaps that still aren't addressed
c) What this researcher is doing to address those gaps
d) The implications of this research for the future

It helps if you can bring some emotion or other human element to the story. We usually first make an outline with quotes from the interviewee, then build narration around it. Use analogies or metaphors to break down complicated concepts (e.g. velcro for sticky strands of DNA, a DJ tuning gene expression levels for CRISPRi/CRISPRa systems). Our scripts have had anywhere between one and three narrators, and span from the lighthearted to the more didactic. We also like to mark spots where we think music or sound effects could help the story.

**5. Record narration**
This is the fastest part of the process, once the script is written. Just sit down in a relatively small space, ideally with few hard surfaces (to prevent echo) and record the same way you recorded the interview. We do at least two takes, to make sure there's something usable for every section of script. Don't forget credits.

**6. Produce & publish**
If you are doing an interview-based podcast without much narration, production will be relatively minimal. We start with noise reduction in Audacity (a free program available at sourceforge.net/projects/audacity/), then import all our audio into Hindenburg Journalist (hindenburg.com/products/hindenburg-journalist, $95 for two licenses). Here, we split up tracks, adjust levels so all speakers are the same volume, and add music or sound effects where necessary (mostly taken from archive.org/details/freemusicarchive).

Prior to publication, we write a short (~100 word) blurb to accompany the episode and make a cover image. We then upload to PodOMatic (podomatic.com, $24.99 per month for PROplatinum, forwards to iTunes, Spotify, Stitcher, etc.) and SoundCloud (soundcloud.com, $144.00 per year for Pro Unlimited), post it on our website, and share on our social media channels (Facebook, Twitter, Instagram). We also share a behind-the-scenes newsletter with our supporters on Patreon (patreon.com).

Additional Podcast Tips from Grant Burningham:

- Transcribe the interview using otranscribe.com, Rev or Temi.
- Editing:
    - Pick the good parts
    - Open strong, end strong
    - Perform a slight noise reduction and improve levels.
    - Smooth edits, remove breaths and pops.
- Add an intro and outro. You can overlay music or create a standard intro.