Public speaking requires a specific skill set that may be innate or require development through repetitive practice. Truly effective orators speak with confidence and clarity while avoiding distracting behaviors such as needless body motions. Individuals should also display a noticeable enthusiasm about their subject matter in an effort to engage the audience. The audience itself should also be a consideration when developing the style used for a specific presentation.

Speaking within a scientific field often involves conveying information to an audience of one’s peers but the knowledge base of a given audience can still be highly variable. The primary goal of scientific speaking is to convey one’s research or inform an audience of research being done in a given field. While it is true that communication between scientists is vital to the scientific process, informing the general public about scientific advances is equally important. It is a lack of adequate communication that is often responsible for misconceptions about the amount and type of research being done in what are considered “hot button” areas like global warming or stem cell research.

A speaker should keep his or her style conversational avoiding any unnecessary technical jargon while adjusting the pace of the speech to accommodate topic points that may require further explanation. Visual aids such as Power Point are typically utilized to summarize pertinent points and provide data. The speaker should not read from the slides or a prewritten speech. If Power Point is utilized, slides should be visually simple and each slide used to illustrate only a single point. Generally, the speaker should allow approximately one minute per slide. Data should be organized into graphs instead of tables to fa-

The basics of speaking are, for the most part, consistent across disciplines. Knowing the expectations of a discipline is an important part of adapting to your audience, however. The papers in the “Speaking, in my opinion…” series do not represent an official statement from the department. They do, however, give you an introduction to different faculty opinions on effective speaking.
cilitate visual comprehension.

Consistent and regular practice is necessary to avoid unnatural, monotone readings. A really well written scientific paper can still generate a tedious and unexciting scientific presentation. Information should be as detailed as required for the audience but conveyed in a concise manner avoiding extensive explanations that may only result in confusion. Whether the audience is made up of a speaker’s peers or a classroom full of eager learners a vital component of speaking in the sciences is answering questions raised by the presented information. It is important to remain trueful and to admit to not knowing all the answers. Some questions may still be unanswered within the scientific community or may simply be outside the speaker’s knowledge base.