



Our premise is that excellence involves more than what is done, it also encompasses how work is done. This means: exceptional science done ethically; in inclusive working environments with positive interpersonal dynamics; and in ways that develop and support lab members to build productive, meaningful careers. Research groups do not only produce data and results. They also build and contribute to the future talent of the research community.

Culture refers to how groups of people work and live, and it is shaped by underlying values and norms. At work, culture includes communication styles and the tone set by leadership, as well as expectations about how tasks are performed, the degree to which inclusiveness is fostered, and the equity with which opportunities are shared. Conceptions of “excellence” differ, and thus research cultures can be considered excellent even while displaying varying emphases on collaboration versus competition, autonomy versus independence, and guidance and development for doctoral students on their way to becoming scientific leaders.

Our premise is that excellence is more than *what* work is done, it also encompasses *how* work is done: with rigor, reproducibility, inclusion, and integrity.

An excellent culture is one in which all participants thrive. When a culture only supports excellence for a subset of scientists, then it is an incomplete view of what true excellence can be. As labs work toward creating environments of meaningful inclusion, we believe that no matter what other measures are considered, cultures of excellence today must broaden the pool of talent, adapting to support the needs and talents of the participants, and allowing their wide range of perspectives and insights to enhance the productivity and creativity of the research.

Many attributes of creating a culture of excellence are not intuitive, especially those concerning uses of power and authority. People with authority can inadvertently silence or harm those with less power through not understanding the effects of their words and actions. This dynamic is exacerbated when those with less power occupy environments that are unwelcoming to them. Power dynamics, combined with fear of failure, intersect to reduce levels of trust among members of the group, as well as increase stress, in ways that suppress their ability to fully contribute as members of the research team. This harms them and inhibits the process of collaboration.

Culture is manifested in how individuals behave—and this means that culture is not something fixed or given, but rather something that groups can create or change. Awareness is a crucial first step. Building cultures of excellence requires recognizing power dynamics and building trusting relationships in order to get the best out of all participants, as well as forming habits that can help build careers.



