To collaborate means to work jointly with others, especially in an intellectual endeavor, such as a project involving scientific writing or research to be jointly accredited. In essence, it means to labor together. Efforts may involve communications, simply an exchange of information; or they may involve cooperation, which is to act or work with another or others for mutual benefit. The terms cooperate and collaborate are synonymous.

Effective collaboration/cooperation cannot be legislated or easily achieved by administrative edict. It is dependent upon the creation of an appropriate atmosphere and is driven by factors such as:

1. Identification of researchable problems. If the research area involved is too difficult for the state of scientific techniques and no definitive approach is available, it will preclude the research from being successful. Problems need to be defined.

2. Personal scientific interests. One of the best ways to get people to cooperate is to have them agree to work together on a specific problem through the exchange of ideas and resources.

3. Compatible personalities and backgrounds of individual scientists. Informal cooperative efforts depend upon the willingness of individual scientists to pool resources and expertise in striving to attain common goals. Personnel who have established themselves in their own research area are often best suited to become involved in interdisciplinary and collaborative research activities because many research organizations emphasize early independent research in their reward system.

4. Good communications. Special care needs to be taken to assure good communications. It is highly desirable for cooperating researchers to hold frequent discussions and share information. Modern telecommunication systems will enhance the sharing of information and reduce the need for structured meetings.