

What are lines of research?

A line of research includes a particular series of published articles on the same topic. The minimum number of articles is not defined; however, 10 is usually considered a reasonable number.

The publications may have one or more authors who are part of the same postgraduate program. In some research centers in Brazil, colleagues have developed extensive series of studies on a particular topic and have created their own lines of research.

These researchers are usually involved in postgraduate programs within academic departments or large private hospitals. It should be noted that projects of this nature can seldom be developed by individuals. Students are supervised by the research leader and the studies they perform are like pieces of a large puzzle. When these pieces are combined, they can lead to robust conclusions. Therefore, a line of research may be the idea of one researcher but it is always the result of a team's effort.

A line of research may take several years to consolidate and involve a large group of researchers. In turn, it allows for the development of future independent lines of research. This new research, whether it follows previous studies undertaken in postgraduate programs or is newly developed by the researcher, is always more challenging at the beginning.

As previously mentioned, a line of research should address a specific topic. For example, studies on the abdominal wall and abdominoplasty cannot be considered a line of research since they are vast and varied subjects. However, a topic such as the "Assessment of the mechanical properties of the musculoaponeurotic plane of the abdominal wall" may be considered a line of research. This line may include the study of techniques used to correct the musculoaponeurotic plane and their effects on fasciae tension. Data obtained can be converted into a new line of research, such as the composition of the extracellular matrix of that plane or the effect of specific muscle corrections on the intra-abdominal pressure. In turn, the increase in intra-abdominal pressure is related to thromboembolic events, increases in venous stasis, etc. Branches arise from the main line, similar to that in a tree.

Plastic surgeons should choose a topic in which they have interest and that contributes to the generation of scientific knowledge. Every study should try to elucidate an answer to a problem to address issues such as the improvement of surgical techniques and postoperative recovery and the reduction of complications. Moreover, some answers may show a larger picture that will serve a purpose in the long term, such as mosaic studies that are completed when they are eventually finalized. These are usually basic sciences studies.

A line of research may end when the research team has no interest in pursuing studies on a particular theme or when the group's efforts are directed toward other areas of greater interest. In fact, a particular subject brings endless questions; therefore, a line of research does not end through a lack of new objectives. It should be noted that a plastic surgeon who is dedicated to a particular line of research within rhinoplasty may also be an excellent breast surgeon.

The main goal of a line of research is to provide a direction to the scientific knowledge generated by the researcher, thus contributing to the development of the specialty. Various areas of plastic surgery are becoming more specialized, and detailed studies are increasingly needed to support and drive this development. Being at the forefront of professional and scientific development in the various areas ensures that we remain the principal reference for the patient and for the evolution of the specialty.

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