

Editorial

## Facing tomorrow – where evidence based plastic surgery meets aesthetic and longevity medicine

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*The way to get started is to quit talking and begin doing.*  
— **Walt Disney**

Plastic surgery is a specialty built on problem-solving and innovation, values starkly in line with evidence-based medicine. Evidence-based medicine is defined as the conscientious, explicit, and judicious use of current best evidence, combined with individual clinical expertise and patient preferences and values, in making decisions about the care of individual patients. [1] Evidence-based medicine is becoming more ingrained in our everyday practice and plastic surgery culture; however, we must work actively to ensure that we continue this trend. Striving for the highest level of evidence will be one of the main tasks of the editors in chief of Aesthetic

Medicine and Plastic Surgery (Table 1). It is my great honor to join forces with Prof. Gentile and Prof. Fansa in this task to raise the bar of publications in all aspects of plastic surgery, from reconstruction to aesthetics and the emerging field of longevity medicine.

It is our privilege as plastic surgeons to enhance the quality of life for our patients. For reconstructive patients, surgical restoration of a functional deficit caused by congenital deformity, trauma, or oncologic resection will be entailed. For aesthetic patients, tissue aging and deviations from what is deemed attractive drive the patients to seek surgical improvement in their appearance.

**Table 1.** American Society of Plastic Surgeons Evidence Rating Scale for Therapeutic Studies. [2]

Level of Evidence	Qualifying Studies
I	High-quality, multi-centered or single-centered, randomized controlled trial with adequate power; or systematic review of these studies
II	Lesser quality, randomized controlled trial; prospective cohort or comparative study; or systematic review of these studies
III	Retrospective cohort or comparative study; case-control study; or systematic review of these studies
IV	Case series with pre/post test; or only post test
V	Expert opinion developed via consensus process; case report or clinical example; or evidence based on physiology, bench research or "first principles"

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An emerging goal of our specialty with tremendous long-term benefits is to spark new ideas and innovations to bring the science of aging and its cure into the clinical realm and reality of everyone on the earth. This new field of study and practice full of innovation must manifest as a core discipline of plastic surgery.

Longevity medicine is advanced form of personalized and preventive medicine powered by biomarkers of aging and longevity, and is a fast-emerging field. Understanding the aging of each of the five main levels of our biology (cell, tissue, organ, organ system and organism) is the core task of the new branch of research in longevity medicine. The search for a single cause—and therefore a cure—for aging has been replaced by the view that it is a highly complex process with many causes. Deciphering this process and the corresponding causes is the most exciting task of our time. The latest findings from longevity research are frequently intertwined with regenerative surgery and aesthetic applications. Therefore, in this journal, I will provide a platform to shed light on this revolutionary field of research, particularly within its interface with regenerative and aesthetic surgery.

Considering that the roots of plastic surgery lie in transplantation and general surgery, and that unlike other specialties, plastic surgery does not "own" a single organ in the body, plastic surgeons have relied on their ability to innovate to create a distinct and valued identity among physicians and surgical specialists. Innovation has not only formed our specialty, but also remains one of our core capabilities that enables us to remain at the forefront of new technologies in medicine. Furthermore, innovation will be a primary component of our future success. Plastic surgery does indeed own innovation as its "organ." [3] However, some of the most innovative topics are very controversial and often fill me with apprehension, as well as a twinge of excitement. That is often how creativity manifests itself.

Therefore, innovation is not always easy to accept, and pioneers often skate on the thinnest of ice. Our field is very much alive and will continue to breathe only with creativity and innovation as its lifeblood. The responsibility to be creative lies with each of us, and I encourage everyone to be brave and continue innovating, inventing, and creating new and unique ways to both enrich and enhance the lives and safety of our patients.

I would like to end with the words of Dr. Geoffrey Gurtner, a great innovator in our field and my mentor during my time as a postdoctoral fellow at Stanford University, which still ring in my head regularly:

*Keep thinking.*

## Disclosure

The author has no disclosure.

## References

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