



Innovations: a dawning of a new age

Geoffrey G. Hallock

Associate Editor, *Archives of Plastic Surgery*
Division of Plastic Surgery, Sacred Heart Campus, St. Luke's Hospital, Allentown, PA, USA



Innovation forms the backbone of our specialty—Rohrich et al. [1]

Ideas→ Insight→ Ingenuity→ Improvisation→ Invention→ Innovation. Perhaps the preceding is not in the correct order nor one leads to the other, but surely we cannot argue that without innovation there will be no future for the specialty of plastic and reconstructive surgery [1]. We own no anatomical territory [2], but we are the “problem solvers” for all other surgical specialties [3]. From the Oxford English Dictionary, innovation may be defined as the “alteration of what is established by the introduction of new elements or forms [4,5].” A too often rigid adherence to what is established, that is, omnipresent dogma, restrictive rules, and deafening protocols, will only stifle creativity [6]. An unsolvable problem or for that matter one that is just routine, may have an unforeseen better solution—that an innovation that must be original, quite relevant, pragmatic, and preferably simple in application [3,4]. Necessity may be the mother of invention, but innovation is its identical twin.

The typical innovator has a unique personality. Diverse traits may encompass common sense, a flair for creativity, flexibility, logical intuition, pragmatism, independent source of motivation, a spirit of enthusiasm, obsession for perfectionism, and undaunted perseverance [6]—already characteristics of most plastic surgeons!

Remember though that Edison stressed that the genius of innovation was “1% inspiration and 99% perspiration [7].” Thanks to technological advances in communication, today innovation has become a global capability [8]. No longer is there a hindrance for the solitary individual in a community hospital or remote geographical location. After all, did not long ago

Buncke develop microsurgery in his garage [9], and it is said that Robert Acland in the beginning was a “one man band [10],” although the two often exchanged ideas and perhaps innovations using correspondence today we call snail mail!

But innovation will be valueless unless there is dissemination in some form, usually via presentations or currently more often in our literature [11]. Rohrich et al. [1] have emphasized that innovations must be backed by high-level proof of efficacy to overcome the appropriate skepticism and conservative behavior of most physicians.

Buncke's guiding philosophy was that “ideas are cheap, results are priceless [12],” and that “we learn by failures [10],” often our own. Thus, it is logical that most major plastic surgery journals today seek “results,” and have a preference for publishing large clinical trials, meta-analysis, and outcome studies. Submissions for “ideas and innovations” are typically restricted to a minimum number of words, figures, and supporting references—barely enough to scribble down the details. Yet without innovation, whether appropriate or not often to be first found in the daring and novelty of case reports (e.g., Taylor and Daniel's first composite tissue free flap [13]) or small patient series, the fear without them should be that there will be no future new outcomes to study. This should not be forgotten by this new editorial board of the *Archives of Plastic Surgery*. Their goal should not be just to be the premier Asian plastic surgery journal. This journal should stand out as the “Journal of Plastic Surgery Innovations.”

The goal would then easily be changed, to be the premier global plastic surgery journal!

NOTES

Conflict of interest

Geoffrey G. Hallock is an editorial board member of the journal but did not involve in the peer reviewer selection, evaluation, or decision process of this article. No other potential conflicts of interest relevant to this article were reported.

ORCID

Geoffrey G. Hallock <https://orcid.org/0000-0001-7690-6966>

REFERENCES

1. Rohrich RJ, Cason RW, Avashia YJ, et al. Evidence-based innovations driving the future of plastic surgery. *Plast Reconstr Surg* 2021;147:258-61.
2. Hultman CS, Friedstat JS. The ACAPS and SESPRS surveys to identify the most influential innovators and innovations in plastic surgery: no line on the horizon. *Ann Plast Surg* 2014;72:S202-7.
3. Longaker MT, Rohrich RJ. Innovation: a sustainable competitive advantage for plastic and reconstructive surgery. *Plast Reconstr Surg* 2005;115:2135-6.
4. The compact edition of the Oxford English dictionary. Glasgow: Oxford University Press; 1971.
5. Lineaweaver WC. Ingenuity and innovation. *Ann Plast Surg* 2009;63:587.
6. Mehta H. On innovations in plastic surgery. *J Plast Reconstr Aesthet Surg* 2009;62:437-41.
7. Edison TA. Genius is one percent inspiration and ninety-nine percent perspiration [Internet]. Austin, TX: BrainyMedia, Inc. [cited 2021 Mar 9]. Available from: https://www.brainyquote.com/quotes/thomas_a_edison_109928#:~:text=Edison%20Quotes&text=Genius%20is%20one%20percent%20inspiration%20and%20ninety%20nine%20percent%20perspiration.
8. Evans GRD, Blondeel P, Marchac D, et al. Transatlantic innovations: a new approach to international ideas and technology. *Plast Reconstr Surg* 2010;126:316-36.
9. Hallock GG. The plastic surgeon of the 20th century. *Plast Reconstr Surg* 2001;107:1014-24.
10. McGrouther DA. Robert Acland (1941-2016) innovator, microsurgeon, anatomist and teacher. *J Plast Reconstr Aesthet Surg* 2018;71:126-31.
11. Lineaweaver W. The communication of innovation and invention. *Ann Plast Surg* 2014;73:361.
12. Rudolf B. Harry J. Buncke, M.D., 1922 to 2008. *Plast Reconstr Surg* 2008;122:1989-90.
13. Taylor GI, Daniel RK. The free flap: composite tissue transfer by vascular anastomosis. *Aust N Z J Surg* 1973;43:1-3.

Correspondence: Geoffrey G. Hallock
 Division of Plastic Surgery, Sacred Heart Campus, St. Luke's Hospital, 1230 South Cedar Crest
 Boulevard, Suite 306, Allentown, PA 18103, USA
 Tel: +1-610-435-7555, Fax: +1-610-435-8164, E-mail: gghallock@hotmail.com
 Received: February 2, 2021 • Revised: February 23, 2021 • Accepted: February 24, 2021
 pISSN: 2234-6163 • eISSN: 2234-6171
<https://doi.org/10.5999/aps.2021.00255> • Arch Plast Surg 2021;48:147-148
