

# **FOREWORD**

# Progress and Milestones in Scientific Communication – a 150 years perspective

# TORBJÖRN KARLSSON

Chairman of the Upsala Medical Society, Uppsala, Sweden

Science expands knowledge not only through understanding but also through communication. Words form ideas, and words are tools for thoughts. The world looked very different 150 years ago. Scientific communication had a completely different language than now, and we were more strictly dependent on the spoken and printed word. The dissemination of new ideas was much slower than today, leading to a lower tempo in the questioning of new as well as older thoughts. A scientific journal published in Uppsala, Sweden, and most often in Swedish, had difficulties in the nineteenth century in reaching the wider scientific community.

The relatively new digitalized and immediate scientific communication by means of the Internet and database searches has given us a completely new landscape. Proudly we can say that our journal has evolved much since the early days and is today globally accessible. This is thanks to scientists presenting their work, and to editors and referees for reading and criticizing it. True open access is today an important cornerstone in the idea of scientific publication, and we want the journal to remain accessible for everyone. Publications were initially predominately from authors at Uppsala University and other Swedes, and still we welcome good manuscripts from locally active scientists. However, the journal is open for everyone, and we welcome important science reports from wherever they are produced.

We have had the opportunity to read many papers in this journal through the years (1-4). Some of the publications are still much cited and are still of high scientific impact. Others reflect their time and ideas and thoughts which are difficult for us to understand and accept today. Finding a completely new gland in the human body (5) is not possible today. Seeking the human mind and awareness in a decapitated head is hopefully the scientific scope of a bygone age (Holmgren, 1876, 'On Decapitation, from a Physiological viewpoint') (6), but today we can deepen our understanding of human physiology, e.g. by means of the genetic knowledge given us in more recent decades. Our increased computer power means that we can create better images than ever before and with a resolution down to the molecular level. Today we can easily make complex calculations and models of dynamic procedures with powerful tools not foreseen by our predecessors.

The very first papers of our journal were published in Swedish (e.g. by Frithiof Holmgren) and had to be translated in order to be accessible for a greater scientific community. Important work was later published in English, but because of the turbulent war times and the lack of scientific databases and congresses it took a long time before they reached the international community (e.g. Lundsgaard, 1939, 'On the mode of action of insulin') (7). Now we live in a world where information is at our fingertips, a world where science and education have come closer to everybody. The thoughts of Dr Marshall McLuhan in the classical 'The Gutenberg galaxy' 1962 have evolved another step.

The *Upsala Journal of the Medical Sciences* has been published for 150 years. What is the future of the journal? Will we still read journals printed on paper in the years to come? We have to stay open-minded and ready for the communication tools of the future, not pointing in any specific direction but ready to adapt. Reading the journal through the years means finding many interesting thoughts but also some that we do not agree with

Correspondence: Torbjörn Karlsson, Upsala Medical Society, Uppsala, Sweden. E-mail: torbjörn.karlsson@surgsci.uu.se

# 64 Foreword

today. Perspective changes, and all subjects and findings presented in the journal should be open for debate. The first title of the journal was *Upsala Läkareförenings Förhandlingar* (Proceedings of the Upsala Medical Society), the name in itself indicating that the findings published were to be discussed. Views changed over the years, and thus it is necessary to apply a historical perspective even when we look at some items in this specific issue.

The primary goal of the Upsala Medical Society is to promote medical science and education. It stands, as ever, close to the Faculty of Medicine of Uppsala University. In 1865 the publication of a scientific and educational journal was a way of fulfilling the purpose of the Society; as it is today. The journal has an important place in the history of medical science, and the Upsala Medical Society is proud to own and run a modern scientific journal (8).

# References

- 1. Sandström I. On a New Gland in Humans and Several Vertebrates. Upsala Läkareförenings Förhandlingar. 1880;15:441-71.
- 2. Holmgren F. About the Retinal Stream. Upsala Läkareförenings Förhandlingar. 1870–1871;6:419–55.
- 3. Grimelius L. A silver nitrate stain for alfa2 cells in human pancreatic islets. Acta Soc Med Ups. 1968;73:243-70.
- 4. Westermark P. Quantitative studies of amyloid in the islets of Langerhans. Ups J Med Sci. 1972;77:91-4.
- 5. Johansson H. The Uppsala anatomist Ivar Sandström and the parathyroid gland. Ups J Med Sci. 2015;120:72–7.
- 6. Holmgren F. On Decapitation, from a Physiological viewpoint, Upsala Läkareförenings Förhandlingar, 1876;7–8:588–648.
- 7. Lundsgaard E. On the mode of action of insulin. Upsala Läkareförenings Förhandlingar. 1939;45:143–51.
- 8. Andersson A. Further improvements of our journal performance figures. Ups J Med Sci. 2014;119:295-7.