EDITORIAL 10:1

LASER THERAPY — A DECADE FURTHER ON

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In September of 1988, we had the honour and pleasure of seeing our first joint Editorial to the Pilot Issue of *Laser Therapy* in print, followed in 1989 by the appearance of Volume 1:1 of the journal. Today, we have the ten-fold honour and pleasure of providing this joint Editorial to Volume 10:1.

It is hard to believe that a decade has in fact passed since we wrote in that first Editorial about the importance of using correct and accurate terminology in laser therapy: some things never change. Since then our coined term 'Low Level Laser Therapy', later modified to 'Low reactive-Level Laser Therapy' and both abbreviated as 'LLLT' has become the single most used terminology in the LLLT literature and in national and international congresses. Other equally acceptable terms such as 'Low Intensity Laser Irradiation' (LILI) from colleague David Baxter of the University of Ulster and 'Low Level Laser Irradiation' (LLLI) from a variety of authors have also evolved to describe the overall indication of LLLT in nonclinical research environments. Although some recidivist authors and presenters still lapse into the dinosaurian terms of 'low power laser', 'cool laser', 'cold laser', 'low energy laser' and so on, these are slowly but surely being replaced with LLLT, LILI, LLLI or the easiest term to understand, 'laser therapy', which is of course also the title of this journal.

In some fields, however, notably in the USA, there is confusion between our use of the term 'laser therapy', meaning indication of low incident photon densities of laser light to induce photobioactivative changes in the target cells or tissues, and other authors' use of the same term to denote actions of a laser surgical nature, where high incident photon densities are used to incise, vaporize, and coagulate tissue or to degrade and denature protein. These are for the most part irreversible photodestructive reactions, more suited to the term 'laser surgery' than 'laser therapy'. It is, nevertheless, early days yet: ten years is a comparatively minor drop in the ocean of time, and we are sure that this journal and our

associated body, the World Association for Laser Therapy, will continue to champion the use of scientifically correct and etymologically accurate terminology.

In these ten years, many things have happened in the exciting and fast expanding field of LLLT. The journal, bravely published by John Wiley and Sons in Chichester, UK up until the end of Volume 5, went from Volume 6:1 to a new publishing house, the small but selective company, LT Publishers, Limited of Rishworth, Yorkshire, UK, ably backed up in production by the University of Hokkaido Press, Sapporo City, Hokkaido, Japan. The Founding Editor (T.O.) handed over the reins of the journal to Senior Editor-in-Chief, Professor Osamu Kemmotsu (Department of Anesthesia and Critical Care, University of Hokkaido Medical School, Japan) and Co-Editor-in-Chief Professor Chukuka Enwemeka (Department of Physical Therapy and Education, Kansas University Medical Center, Kansas, USA).

Four major international meetings have been held dedicated to LLLT alone. They were the 1st International Laser Therapy Association (ILTA) Congress in 1990, held in Okinawa, Japan under the presidency of Dr Toshio Ohshiro. The 2nd ILTA Congress was in London, UK, with Dr Mary Dyson as President, in 1992. 1994 saw the 3rd ILTA meeting held in Barcelona, Spain with Dr Mario Trelles as President. Under Dr Trelles' presidency we saw at this meeting the fusion of two major, and in some ways competing LLLT associations, the ILTA and the International Society for Low Power Laser Applications in Medicine and Surgery, to form the new World Association for Laser Therapy (WALT). The first WALT congress was staged very successfully in Jerusalem, Israel in 1996 under the able Presidency of Dr Semion Rochkind, the current WALT President. This year in September we will move forward to the second WALT meeting in Kansas City, Kansas, USA, where the man in charge is the charismatic researcher and educator, Professor Chukuka Enwemeka.

This will mark the first major meeting on laser therapy held in the USA, where to date no approval to market has been granted to any laser therapy manufacturer by the USA Food and Drug Administration (FDA). That state of affairs is confidently expected to change in the latter part of this year, as reported by one of the authors (R.G.C.) at this year's meeting of the American Society for Laser Surgery and Medicine (ASLMS) in San Diego, California. The year 2000 will take us into the Second Millenium, when the third WALT congress, after fierce competition among prospective sites, is to be held in Athens, Greece under the able Presidency of Dr Nick Nicolopoulos. The fourth meeting in 2002 has received two bids, from Japan and Australia, and the fifth 2004 meeting has already been bid for by Singapore.

It is very clear that the interest in LLLT is growing fast, and concomitantly with this growth we are seeing the publication of more and more good scientific papers which explore the basic pathways of action of LLLT at tissue, cellular, subcellular and even molecular and genetic levels. The vast majority of these papers, many (but by no means all) of which have appeared in this journal, have served to give a scientific basis to the clinical findings empirically demonstrated by a vast number of papers, a gratifyingly large number of which have employed controls, with double blinding and cross-over elements. There is no doubt that LLLT is approaching medicoscientific credibility, and the granting of a premarketing approval (PMA) from the US FDA will certainly enhance this perception. The authors are very happy to have been amongst the first to put forward all of these very important concepts in this ground-breaking journal, and we are very proud, together with the current Executive Editorial Group and the Editorial Board, that the journal has entered its tenth decade still going strong, and getting even stronger.

We have seen new stars emerge in the LLLT firmament, but sadly we have seen very important and much loved protagonists pass away. In our first Pilot Issue Editorial, we dedicated the journal to the memory of the late Professor Endre Mester, the Godfather of LLLT. In the first issue of the journal proper, 1:1, we recorded our sadness at the untimely death of Mester's wife, Gina. In Issue 4:1 we noted the sad passing of Professor Vitor Aldo Fasano of Turin University, before he was able to take up a well-deserved post on the journal Editorial Board. There has been a sadly large number of Obituaries recently. 9:3 marked the death of Dr Walter Dyson, loving husband of Dr Mary Dyson, and in 9:4 we mourned the loss of Professor Uichi Kubo, a personal friend and mentor of both authors. In winter

of last year, Professor Leon Goldman departed 'this mortal coil', a giant in the field of medical lasers, the Godfather of surgical lasers and the first teacher of laser biomedicine to Toshio Ohshiro in 1976. This issue marks the untimely death (and when is death *not* untimely?) of Connie McKibbin, beloved wife of Dr Lloyd McKibbin. Life, however, must go on, and all of these whose deaths we have noted, and the many, many more which we have been unable to note, in his or her way lent a great deal of their personal efforts and placed their personal stamp on the development of our field of LLLT and photobioactivation, just as inevitably others shall as we proceed towards the Second Millenium.

And so, faithful readers, with this first issue of Volume 10, as the first ever Editorials of *Laser Therapy* we proudly and happily salute all who have helped towards ensuring the success of the journal, whether as editorial staff, production staff, or (perhaps most important of all) contributors. Just as LLLT itself is poised to leap into the Second Millenium as possibly one of the most important clinical tools in the twenty-first century, so the journal is similarly poised. It very much looks as if the paper supply problem experienced in previous issues has started to resolve itself. Having said that, we also have to point out that the rejection rate has also increased and we are now looking at between 25% and 30% of papers returned to authors without even going through the peer review process which is the cornerstone of this journal. The main problem is insufficient or incorrect reporting of parameters in both clinical and experimental studies, or studies which are inherently flawed and poorly designed. Please remember: the Editors of the journal welcome papers from all LLLT practitioners and researchers, no matter if the papers are 'one off case reports, double blinded clinical trials, or fully controlled basic scientific studies. We welcome and actively encourage papers from physiotherapists, physical therapists and paramedical professionals; veterinarians; dental surgeons; and all members of any clinical and surgical speciality. We also want to encourage the use of the journal as a forum for discussion, so if there is something in any of the articles (including the Editorials!) with which you strongly disagree, or wish to comment on, do please write to us, care off the Editor-in-Chief nearest your regional area. The author concerned will be sent a copy of your letter, and will be offered the chance to reply. Let us make the next ten years of *Laser Therapy* even more successful than the past ten, and let's make it happen for LLLT!

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