

“The Sun is not setting, and Nuclear Medicine is not Riding out of Town any time soon”

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"The late Dr. R.D. Ganatra, who was then Head of Radiation Medicine Centre, Mumbai way back in 1982 gave an inspiring speech at the SNM India meeting held at Jaipur at a time when every one was thinking about the impending death of Nuclear Medicine. The transcripts of that speech was published in one of the earlier issues of World Journal of Nuclear Medicine. We have reproduced the same article once again in this issue of WJNM. Dr. Ganatra went on to become the Head of Nuclear Medicine at the IAEA and then the Director of Human Health. That speech was clearly an artistic and philosophical reflection on the cardinal principles of Nuclear Medicine practice. It looks like times never change. Nuclear Medicine Imaging and Therapy is a fantastic growth area right now, only because the science underlying it is strong and driving it. We can be innovators only because Nuclear Medicine is a wholesome rigorous discipline of thinking and working, with its own specialized knowledge which not many people have, and not just the endpoint of an imaging process.

Nuclear Medicine is now arguably the best of both worlds, with anatomical information and functional information combined. But being the best of both worlds means we should not take these privileges for granted but to keep on striving for ever greater heights.

Recently Prof Andy Adams (President of the Royal College of Radiologists UK) gave the Distinguished Academician lecture at the Singapore-Malaysia Congress of Medicine. His talk was titled "does radiology have a sell-by date (i.e. expiry date)" and in the first slide, he showed the silhouette of a cowboy on his mule heading into the sunset, representing the last radiologist leaving the country of radiology, because there is no more need for a radiologist!

As part of his deep reflection over many years, he passionately felt that if radiologists do not "add value" to the management of patients, then radiological procedures will slowly be taken away by non-radiologists (e.g. neurologists reading MR brain, cardiologists reading CT coronary angiography).

Another point he makes is radiology should "subspecialize" in order to add value and thirdly, he suggests that radiologists should act more like clinicians, and communicate with patients. These are wonderful thoughts indeed. Nuclear Medicine practice has some of these strong points in view of our unique position of straddling between imaging and therapy but we do well to take note of these valuable advice. Over the last few years there had been pressure on Nuclear Medicine practice to merge with Diagnostic Radiology. The ensuing discussion generally goes like this "..... **If you leave therapeutic part out**, there should be "integration". How anyone can leave the therapeutic part out we cannot fathom and nobody seemed to have any idea beyond fragmenting Nuclear Medicine

into little orphaned pieces. More crucially for Nuclear Medicine, while doctors often mutter the adage that "the sum is greater than its parts", yet some seem to be doing the very opposite by their actions.

In an administrative sense, there are areas of convergence, like logistics, purchase, finance, appointments, image archival, etc. But we do also believe that in a professional sense, Nuclear Medicine can stand on its two feet and we relate to Diagnostic Radiology **as brothers rather than as father and son**. For the sake of the multidisciplinary nature of Nuclear Medicine and for our budding NM physicians with their future ahead of them, we don't believe it is possible for the current development of Nuclear Medicine for it to be subsumed as a sub-specialty of any other discipline. Rather, we think if "integration" is the buzz-word of the day, then Nuclear Medicine and Diagnostic Radiology can be "integrated" under a bigger umbrella, perhaps called "Division of Radiological Sciences" or "Division of Radiation Medicine".

On our part as Nuclear Medicine Physicians, we have the imperatives to keep ourselves proud of our tradition. And moving on into the little-known future let me hazard a few suggestions for Nuclear Medicine. Let us :-

(1) Keep ourselves well-informed about the latest medical knowledge. This is particularly important for those of us who have had our medical training years ago. We are now in the molecular medicine era. Nuclear Medicine is most well-positioned to take imaging and therapy to the cellular and molecular level. We must continue to be relevant in a fast-moving medical world. Those of us who have never heard of cell-signaling or what the latest immunotherapy is or the latest sequences of MRI should spend time learning this new knowledge coming out in huge quantum packets. Lots of good work is being done and published monthly in the Nuclear Medicine journals. The journals we read should not only be in Nuclear Medicine but also Nature, Lancet, New England Journal of Medicine and the like. Let us integrate these new knowledge into our practice. At the same time, we need to look inwards and mull over our own Nuclear Medicine principles and techniques. Some young nuclear medicine specialists have lost sight of the many things one can still learn from a simple bone scan or hepatobiliary scan, eschewing these for the more glamorous PET/CT. There are valuable gems yet to be found in these simple tests if only one would have the passion to scrutinize and find them. There are new directions yet to be discovered and vast expanse of knowledge and practice to be explored.

(2) Communicate with non-Nuclear Medicine physicians. We have a strong Nuclear Medicine community, with whom we share our knowledge, or expertise or our little favorite stories and we meet in our

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cosy Nuclear Medicine conferences and seminars. But we also need to discuss medical issues with our non-Nuclear Medicine colleagues, share their agonizing complexities about patient management, their difficult clinical problems, their diagnostic dilemmas and be present at the multidisciplinary tumour boards. We need to add value and we cannot possibly add value if we do not engage with non-Nuclear Medicine doctors effectively.

(3) Keep up our research drive. Every great Nuclear Medicine department is constantly involved in "re-search". Research is the soul of any discipline. It forces us to review, to recollect, to re-evaluate, to re-examine our assumptions. In some Nuclear Medicine departments, there is a hefty service component and time for research is correspondingly curtailed. We need to think creatively how to encourage research in the midst of a heavy clinical service, realizing that, even under the most pragmatic reckoning, without research, our clinical service will deteriorate and we will typically end up in a mental rut, routinely doing things like in a factory line, day in and day out. Not that there is anything wrong with a factory line, but that's not the way it should be in Nuclear Medicine.

We think the future of Nuclear Medicine is bright as long as we are doing good work and striving to do even better. The sun is not setting, and Nuclear Medicine is not riding out of town any time soon."

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