Engineering Assisted Surgery™ - The gold standard in personalised care

Successful clinical interventions rely heavily on human qualities of the clinician, and an association with inaccurate replication and transfer of 2-D treatment plans into patients with three dimensions. Modern Healthcare is the only and last High Tech Industry which still depends on human frailty and the manual skills of its workforce – skill requirements that have long been abandoned by sister industries. Engineering Assisted Surgery™ (EAS) is defined as “the application of industrial and engineering systems to health care delivery” with respect to existing interventions and new/evolving surgical procedures, across a range of specialities. EAS has important applications related to current surgical practice, and the recent introduction of additive manufacturing, permits mass production of both standard and customised medical devices/implants at much lower cost, and is set to revolutionise surgical practice. It is predicted that customisation will become the norm in personalised healthcare programmes within the next decade. Healthcare is in the perfect position to benefit from these advances made by adopting customisation, and in particular additive manufacturing technologies, to support the surgeons in delivering improved and consistent outcomes for patients. EAS heralds new gold standards in the provision of global healthcare, with an improvement in efficiency, quality and outcome, already seen in other industries, and not only promotes the concept of best practice; it makes best practice a reality. The value of an industrial contribution to healthcare modernisation has been now internationally recognised. However, such a process can only be effectively implemented within EAS Training Centres of Excellence, and in partnership with concomitant reforms in healthcare policy, funding, management and delivery. EAS™ provides an evidence based and efficacious industrial model on which to build modernised healthcare systems, which are currently under so much pressure, and therefore such programmes require utmost priority.

Biography

Ninian Peckitt has worked in this research area for 20 years and has an international reputation in this area of expertise. His lectures employ sophisticated multi-media technology to describe the planning and management of cases, some of which are very complex. In this lecture, the reconstruction of the entire midface, including the dentition, is demonstrated as a day case procedure in a surgical procedure lasting only 90 mins. He regularly lectures by invitation and is moving his Training and Research base to the European University College, and his clinical practice to the Nicolas and Asp Clinic, in Dubai.