Propositions

Immersive Virtual Reality in Cardiothoracic Surgery
"paving the way for a digitalized new era"

1. Virtual reality is an effective and easy-to-use tool for remote multidisciplinary heart team meetings
   – this thesis

2. Virtual reality visualization of segmented chest computed tomography (CT) scans in preoperative planning of cardiothoracic surgical procedures can provide additional important insights
   – this thesis

3. A problem-based, multidisciplinary approach is required to develop virtual reality visualization tools for surgical planning.
   – this thesis

4. Virtual reality is a promising emerging technology that could potentially change the way surgical planning will be performed in the future
   – this thesis

5. Immersive virtual reality provides a unique opportunity for non-surgical skills training such as cardiopulmonary resuscitation after cardiac surgery
   – this thesis

6. Virtual reality will allow physicians to learn more quickly, interpret images more accurately, and accomplish interventions in less time
   – Silva J.N.A. JACC Basic Transl Scienc, 2018

7. Disasters and pandemics pose unique challenges to health care delivery. Though telehealth will not solve them all, it’s well suited for scenarios in which infrastructure remains intact and clinicians are available to see patients
   – Hollander J.E. NEJM, 2020

8. Image-based preoperative planning is a key component of the trend towards precision and personalized medicine
   – Essert C. Handbook of Medical Image Computing and Computer Assisted Intervention, 2020

9. The best way to predict the future is to create it yourself
   – Diamandis P. Singularity University

10. Virtual and augmented reality can revolutionize surgical education and training. In the new classroom environment, there will be no place for cadavers; it’ll be case-based anatomy, teaching and learning using Hololens and virtual reality.
    – Ahmed S. The Guardian

11. A candle never loses any of its light while lighting up another candle
    – Rumi / Molana

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