**Title**: Are we over irradiating our patients.

**Likely session**: Lunchtime symposium

**Aims of the session**:

1. Recognise the doses of radiation in different modalities and the effects of radiation on the human body and the growing skeleton.
2. Technological advances in radiography and CT scanning
3. Methods of data acquisition and data modelling to reduce the dose exposure
4. Alternative technology to conventional radiographs
5. Intraoperative imaging doses, techniques and reducing the risks.

**Talks, proposed speakers:**

1. Introduction: Physics of ionising radiation and its effect on the body.

 Jim Sanders, Michael Vitale

2. Typical radiation doses and newer technologies to reduce the dose.

 Stephan Parent, Peter Newton

3. Intraoperative image guidance and navigational techniques

 Suken Shah, any other suggestions

4. The newer intraoperative imaging techniques and radiation doses.

 Frank Schwab, Lawrence Lenke, any other suggestions