

2016.11 EFRS Statement on

#### **RADIOGRAPHY RESEARCH IN EUROPE**

Strengthening evidence-based practice within the profession

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# RADIOGRAPHY RESEARCH IN EUROPE - STRENGTHENING EVIDENCE-BASED PRACTICE WITHIN THE PROFESSION

This statement on radiography research sets out the EFRS endeavors to progress and support high level research activity within the profession. The EFRS will liaise with organisations in Europe who have a vested interest in the development of the radiography profession and science. The principal goal is to strengthen radiography research activity and evidence-based practice for the profession to ensure the continued development and improvement of imaging and therapy services for the benefit of the patient.

#### Research Mission

The EFRS will encourage, support and develop high quality radiographer-led research in the fields of radiography: medical imaging, radiotherapy and nuclear medicine, to strengthen the knowledge base of radiography science and to stimulate evidence-based practice (EBP) in radiography.

# Background

The EFRS has developed radiography learning outcomes at the European Qualifications Framework (EQF) level 6 (Bachelor) to allow better comparisons between programmes and to provide guidance upon content. The EFRS EQF Benchmarking Document: Radiographers (2014) sets out specific core knowledge, skills and competences to support the provision of optimum radiography services for the patient at a local, national and international level [1]. The document identifies the importance of audit, research and evidence-based practice for radiographers in that graduate radiographers should be proficient in the understanding of the research process, research ethics, statistics and statistical analysis to facilitate a deeper understanding of research findings and clinical audit upon qualification [2].

These EQF level descriptors encompass lifelong learning recommendations which also include vocational education and training (VET) and professional working environment considerations. The EFRS EQF documentation identifies the need for a radiographer to competently:

"use and undertake audits; utilise, interpret, evaluate and analyse data; critically appraise published literature; identify the principles of evidence-based practice and the research process".

Evidence-based practice has evolved in both scope and definition for all healthcare professionals. This requires all healthcare decisions to be based on the best available, current, valid and relevant evidence. Healthcare professionals must be able to attain, evaluate, apply and integrate new knowledge and have the ability to adapt to changing circumstances throughout their professional life [3]. The EFRS Evidence-Based Practice Statement (2015) reiterates the need for knowledge and training in research activity as a core requirement for radiography programmes, to provide essential knowledge for graduates and their lifelong learning and continuing professional development (CPD) needs [3,4]. It is through research activity and audit that the profession of radiography will be better equipped to ensure the constant improvement of service quality for the benefit of service users.

Over the past years the EFRS has strengthened its research reputation through initiatives involving external agencies such as the European Institute for Biomedical Imaging Research (EIBIR). The EFRS is a shareholder of EIBIR which provides a platform to the EFRS membership to utilise their structures, with a view to improving success in major funding applications both within Europe and globally. The EFRS has developed formal relationships with the European Society of Radiology (ESR), the European Federation of Organisations for Medical Physics (EFOMP), and European Association of Nuclear Medicine (EANM) which is essential to the promotion of multidisciplinarity and collaboration in research and continues to be key focus of EFRS. Together with EANM, EFOMP, ESR and the European Society for Radiotherapy and Oncology (ESTRO), the EFRS have now established the European Alliance for Medical Radiation Protection Research (EURAMED) platform with the aim of improving people's lives through innovative multidisciplinary research in medical radiation protection. The multidisciplinarity of this new platform highlights the essential fact that for research in this area to have true impact, and to benefit patients, an inclusive, approach in both research and clinical practice is required.

**Radiography** is the official journal of EFRS and dissemination of research through this pathway or via other appropriate peer-reviewed journals is deemed as essential. In addition, the scientific sessions for radiographers at the ECR, the European congress for medical imaging, have grown both in scope and quality, the emphasis needs to be on maintaining and developing this activity.

The EFRS recognises its role in supporting and promoting European radiography research and has identified six key aims which need to be developed and strategically planned for in the EFRS action planning, namely to:

- 1. Promote the development of radiography science based on a holistic approach to its professional needs.
- 2. Promote the use of validated methodologies and scientific approaches in radiography scientific enquiry.
- 3. Support the development of research groups from within the EFRS membership.
- 4. Develop radiography specific concepts for research purposes.
- 5. Promote the dissemination of research outcomes to EFRS members and external audiences, through multiple mechanisms including EFRS Radiography Research Network (RRN); national and international publications and conference presentations; local hospital seminars, etc.
- 6. Investigate opportunities for research funding and consider development of research initiatives in the field of radiography science.

# Radiography Research Focus

The scope of radiography research activity should incorporate: clinical practice and optimal application across imaging and radiotherapy sub-specialties; technology development; patient care; education; leadership and management for medical imaging, radiotherapy and nuclear medicine professional pathways. It is important that Radiography research opportunities at Bachelors, Masters and Doctoral levels, as well as for those wishing to undertake clinical research outside formal degree programmes, are developed and that collaborations across European radiography education institutions work to progress and enhance research activity in the profession of radiography.

# Radiography Research Resources

The EFRS is committed to develop tools and a dedicated repository to support research activity for EFRS members. Early developments have been the on line Radiographer Research Network (RRN) and support material at the EFRS web site such as the Journal Club Video [5]. In its research activities, the EFRS will endeavor to involve members from across Europe and from across both academic and clinical environments to enhance research skills within its membership. The EFRS will openly promote opportunities for Masters (EQF Level 7) and Doctoral (EQF Level 8) research for its membership and monitor activity over time.

The EFRS needs to evidence growth in research activity. This evidence base will facilitate the EFRS to review the research activity of its members in order to inform strategic support requirements. The need to reward research efforts is acknowledged and the EFRS is committed to review potential mechanisms through which research funding or scholarship awards may be developed.

### Research Standards

The need to develop recommendations and guidelines for research to support research activity of the highest caliber at Bachelors level and for radiographers pursuing postgraduate research activity is of critical importance to profession.

#### References

- [1] European Qualifications Framework (EQF) Benchmarking Document: Radiographers. Approved: November 2013 Version 1.1: February. 2014

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- [2] European Science Foundation. The European Code of Conduct for Research Integrity. 2011. http://www.esf.org/fileadmin/Public\_documents/Publications/Code\_Conduct\_ResearchIntegrity.pdf
- [3] The Implementation of Evidence Based Practice in undergraduate Radiography Curricula: 2015.11. http://efrs.eu/publications/see/2015.11\_Statement\_on\_Evidence\_Based\_Practice?file=884
- [4] EFRS Statement on Continuous Professional Development (CPD): 2013.3. http://efrs.eu/publications/see/2013.03\_EFRS\_Statement\_on\_Continuous\_Professional\_Development?file=327
- [5] EFRS web site research page and on line Radiographer Research Network Radiography Research Network http://efrs.eu/research



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