



Ingham Institute
Applied Medical Research



Medicine

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The Secretary
Joint Standing Committee on Treaties
Email: jsct@aph.gov.au

South Western Sydney
Clinical School
PROFESSOR MICHAEL BARTON OAM
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**Re: Interactions with the ‘Regional Co-operative Agreement for Research,
Development and Training Related to Nuclear Science and Technology (RCA)’**

Prof Michael Barton OAM

I am Scientia Professor of Radiation Oncology and Head of Cancer Research for the Faculty of Medicine at UNSW. I am the Research Director of the Collaboration for Cancer Outcomes Research and Evaluation (CCORE) and the Ingham Institute for Applied Medical Research at Liverpool Hospital. I am Director of Research for South West Sydney Local Health District and have worked for the IAEA on radiotherapy projects in Africa, Asia and Latin America. I chaired the WHO technical document on risk profiling radiotherapy. The benchmarks for radiotherapy service delivery that CCORE developed have now been adopted throughout Australia, Europe and Great Britain.

I am part of the leadership of the team developing one of the world’s first MRI-guided linear accelerators for cancer treatment. This project has attracted over \$20 million in peer-reviewed grants. MRI guidance will revolutionise radiotherapy by identifying and targeting in intra-tumoural heterogeneity.

Role in RCA projects

I have led the Applied Sciences of Oncology Course (ASOC) by Distance Learning project for the RCA. The major impediment to the expansion of cancer services in Low and Middle Income Countries is a shortage of personnel. The purpose of the ASOC was to develop a distance learning course for radiation oncology trainees.

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Under the sponsorship of the Regional Cooperative Agreement (RCA) administered by the International Atomic Energy Agency (IAEA), a CD ROM-based Applied Sciences of Oncology (ASOC) distance learning course of 71 modules was created. The course covers communications, critical appraisal, functional anatomy, molecular biology, pathology. The materials include interactive text and illustrations that require students to answer questions before they can progress. The course supplements existing oncology curricula and does not provide a qualification. It aims to assist students in acquiring their own profession's qualification.

The course was piloted in seven countries in Asia, Africa and Latin America during 2004. After feedback from the pilot course, a further 9 modules were added to cover imaging physics (3 modules), informed consent, burnout & coping with death and dying, economic analysis and cancer care, nutrition, cachexia and fatigue, radiation-induced second cancers and mathematical tools and background for radiation oncology. The course was widely distributed and can be downloaded from the IAEA's website. ASOC was downloaded over 1100 times in the first year after it was posted and has now been downloaded over 2500 times. There is a huge demand for educational materials but the interactive approach is labour-intensive and expensive to compile. More recently the course has been converted from CD ROM to an internet based Content Management System. The course must be maintained to remain relevant.

ASOC has established Australia as a leader in distance learning in oncology in the RCA region through the number of workshops and course evaluations that encouraged collaboration between partners. As a consequence Australian oncologists have become more engaged in education and clinical leadership in RCA countries.

Yours sincerely,

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