



**AAPM 2013**

# **Fearghus O'Foghludha**

## **Memorial Session**

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Duke University

# Fearghus O'Foghludha (1927-2012)



# Fearghus, his roots

- Born in Dublin
- Not a native English speaker, speaking English at age 24
- Studied at
  - University College Dublin
  - National University of Ireland
  - Royal University of Uppsala (Sweden)
  - University of Lund (Sweden)
- Immigrated to the US in 1963
- Became US citizen in the 90s

**MSc graduation from  
University College  
Dublin, 1940s**



# Fearghus, the professional

- 1954: Senior Physicist at St. Luke's Hospital in Dublin
- 1963: Head of Radiation Physics at the Medical College of Virginia
- 1970: Head of Radiation Physics at Duke
- 1992: Taught at ECU
- 2011: Filing a patent...
- Affiliation with Oak Ridge, NIH, NSF, ACR, AEC, CERN, and NASA

# Fearghus, the leader

- AAPM President, 1971-1972
  - Initiator of the AAPM Coolidge Award
  - ExCom
- American Editor, Physics in Medicine and Biology, 1976-1979
- Medical Physics Editor, 1985-1987
- Fellow, AAPM
- Fellow, IOP



Three AAPM Presidents: Fearghus O'Foghludha, Ray Tanner, Jack Krohner, circa 1980





After marathon Med Phys Board session, AAPM, Lexington, KY, 1986



# Fearghus, the scientist

- The skeptic, quick with why questions
- After foundation of things (legal arguments, etc)
- The “absent minded professor”
- Design and optimization of modern mammography techniques
- Design of radiation experiments and apparati for Apollo 13, 16, 17

- Simulation of mammographic x-ray spectra
- Electromagnetic emission from visual display units: a non-hazard
- An experimental “trans-molybdenum” tube for mammography
- Voltage waveform effects on output and penetration of W-and Mo-anode mammographic tubes
- Gamma-ray and neutron dose-equivalent buildup factors for infinite slabs
- Radioactive source materials formable into various shapes, US Patent 7,118,729, 2006
- Brachytherapy seeds and stents that can be activated by neutron rays, EP Patent 1,426,063, 2004
- Formable integral source material for medical devices, US Patent 6,547,816, 2003



**At Duke with William Dunn, 1980s**

# Fearghus, the man

- Great wit! Fun guy to be around
- No interest in yard work or sports!
- Enjoyed his differentness as an immigrant; never left the Irish landscape
- Sweden years, amongst people wo state
- Loved to socialize, guests around the tables, even strangers he did not agree with!

# Survivors

- His wife of fifty-six years, Catherine
- Son: the Hon. Michael O'Foghludha, Resident Superior Court Judge of the 14th Judicial District
- Dr. Ria O'Foghludha, professor of art history at Whittier College





# The take homes

- Fearghus O'Foghludha was one of the pioneers to see and define the critical role of physics in medicine
- Medical Physics today is what it has become through Fearghus's work
- For us:
  - Be authentic to who you are
  - Play your part
  - Be grateful for the legacy

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