

BELNUC Lifetime Achievement Award 2023

Belgian physician/physicist/pharmacist in the field of nuclear medicine

1. Scientific excellence

and (or)

2. Outstanding teaching skills

and (or)

3. Contribution to the Belgian nuclear medicine society and its goals





The two areas that are changing...
are information technology and
medical technology. Those are the
things that the world will be very
different 20 years from now than it
is today.

— *Bill Gates* —



Awardee 2023 : Prof. dr. ir. Johan NUYTS

Johan Nuyts:

Professor at the Faculty of Medicine, KU Leuven, Belgium

Education: KU Leuven

Master Electronic Engineering 1982

Certificat Biomedical Engineering 1983

PhD Applied Sciences 1991

Positions held:

1984 - 1992 KU Leuven. Academic staff member

1992 - 1993 UZ Gasthuisberg, Leuven. Medical physicist

1993 - 1996 Fac. of Medicine, KU Leuven. Assistant professor

1996 - 2013 Fac. of Medicine, KU Leuven. Associate professor

2013 - Fac. of Medicine, KU Leuven. Professor

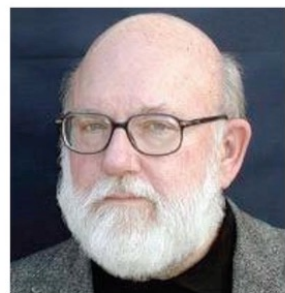
2016 - 2022 Univ. of Sydney, Honorary Professor in Medical Radiation Sci.

1999 - Certified hospital radiation physicist (nuclear medicine)



Awardee 2023 : Prof. dr. ir. Johan NUYTS

Edward J Hoffman Medical Imaging Scientist Award



Ed Hoffman was a co-inventor of the PET scanner,
President of NPSS, EiC of IEEE Transactions in
Nuclear Science.

This award is given annually to an individual in
recognition of outstanding contributions to the
field of medical imaging science.

Edward J Hoffman 2022 Medical Imaging Scientist Award



Johan Nuyts
KU Leuven, Belgium

'For contributions to image reconstruction in
radiology and nuclear medicine'

Nominator: Michel Defrise



Awardee 2023 : Prof. dr. ir. Johan NUYTS

- Research: direct impact on algorithms we use every day in PET and CT
 - > 320 peer reviewed papers & conference proceedings
 - (co)inventor of 5 patents
 - MLAA – iterative reconstruction with attenuation correction estimation
 - Edge enhancing priors (e.g. Bowsher partial volume correction)
 - Artefact reduction (also in CT / CT in treatment planning)
 - Motion correction (e.g. awake small animal PET, data-driven correction with 1s resolution in humans)
- Teaching for the Belgian nuclear medicine community
 - NM Interuniversity Courses : basics of imaging
 - Imaging methods in nuclear medicine for ASO
 - Medical (radiation) physics courses
 - Guidance of PhD/postdocs (many still in the field, FANC,..)



Awardee 2023 : Prof. dr. ir. Johan NUYTS

Bruno De Man

Dirk Bequé

Kristof Baete

Raf Claessens

Kurt De Moor

Catherine Lemmens

Kathleen Vunckx

Lin Zhou

Ameya Atre

Maarten Depypere

Katrien Van Slambrouck

Koen Michiels

Ahmadreza Rezaei

Anna Turco

Georg Schramm

Matthew Bickell

Selmin Eren

Tao Sun

Rob Heylen

Ganna Degtiarova

Esmaeel Jafargholi Rangraz

Masoud Elhami Asl

Marina Vergara Díaz

Xikai Tang

Frédéric Jolivet

Marina Filipovic

Enrique Almar

Seyed Amir Zamanpour

Simon Noë

> 20 PhD (co)supervision + 6 postdocs



Awardee 2023 : Prof. dr. ir. Johan NUYTS



Master class
on primary and
secondary
photons
in Compton scatter



BELNUC Lifetime Achievement Award 2023



ON THE ROAD

*Progress only exists
through tensions and efforts.*

Corry Ammerlaan-Van Niekerk



Artist of outstanding international reputation.
Her trademark is fluent dynamic design with a
feeling of timelessness.



BELNUC Lifetime Achievement Lecture 2023



PET in the next decade

prof.dr.ir. Johan Nuyts

