Welcome Address

Dear Colleagues and Friends,

It is our great pleasure to formally announce ICNC 2019, the International Conference on Nuclear Cardiology and Cardiac CT which will be held in the beautiful city of Lisbon, Portugal, from 12 to 14 May 2019.

The ICNC meeting has been a key international scientific event for nuclear cardiology and cardiac CT imaging for more than 20 years. It provides an opportunity for clinicians and scientists from all over the world to gather to learn about new advances and to exchange scientific ideas and experiences in a distinctive environment. As always, our congress will also provide a unique opportunity by which our Industry Partners may network with the most influential non-invasive cardiologists and cardiovascular imaging specialists from across the world.

The upcoming meeting will provide an exciting and diverse scientific programme which offers a full spectrum of opportunities ranging from continuing education to cutting-edge presentations of original scientific research. Here are some additional reasons to attend:

- Get the latest updates on state-of-the-art Nuclear Cardiology and Cardiac CT
- Learn about innovative multi-modality cardiovascular imaging
- Hands-on interactive learning sessions
- Benefit from valuable take-home knowledge to real-world imaging dilemmas
- Participate in interesting and challenging read-with-the-experts sessions presented by global experts
- Network with the best! From young cardiologists to renowned experts: you share and learn with an entire community. This is your forum for networking, exchange and learning, especially during the moderated poster and poster sessions.
- Beyond nuclear cardiology and cardiac CT, explore the rich culture and heritage of Lisbon!

We look forward to welcoming you in Lisbon for ICNC 2019. It promises to be a conference to remember!

ICNC 2019 Organising Committee Co-Chairpersons,
Organising Committees

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Hein Verberne (NL) EANM

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ICNC Co-organisers

The American Society of Nuclear Cardiology (ASNC)

ASNC, located in Fairfax (Virginia, USA), is committed to excellence in imaging. Representing over 4,500 nuclear cardiologists, radiologists, technologists, scientists and academics all over the world. ASNC is the leader in the development of established standards of care and guidelines in nuclear cardiovascular imaging. ASNC continuously supports the advancement of the profession through education, research and advocacy.

For more information about ASNC, please visit www.asnc.org. Find us on Facebook.com/MyASNC or follow us on Twitter - hashtag: #ASNC2018

The European Association of Cardiovascular Imaging (EACVI)

Created in 2003, the European Association of Cardiovascular Imaging (EACVI), a branch of the ESC, is the leading international network in its field.

Our mission is: "to promote excellence in clinical diagnosis, research, technical development, and education in cardiovascular imaging".

EACVI is a vibrant community almost 10,000 experts representing four imaging modalities under one entity (Echocardiography, Cardiovascular Magnetic Resonance, Nuclear Cardiology and Cardiac Computed Tomography).

Disseminating and encouraging the use of its recommendations all over the world, the EACVI is committed to maintaining the highest standards of professional excellence in all aspects of cardiovascular with a particular focus on:

- Education
- Membership
- Scientific initiatives
- Research
- Network

Learn more about EACVI

The European Association of Nuclear Medicine (EANM)

The European Association of Nuclear Medicine (EANM) is the largest organisation dedicated to nuclear medicine and multimodality imaging in Europe, with a strong focus on interdisciplinary. This is especially reflected in the educational offers of the European School of Multimodality Imaging and Therapy (ESMIT) and the programme of the EANM Annual Congress.

If you are interested in further information about the EANM, please visit www.eanm.org or send an email to the Executive Office at office@eanm.org.
**Symposium Room 1**

09:00 - 10:00

**Asymptomatic coronary atherosclerosis - Can we improve the prediction of clinical events?**

*Understand the strength and weaknesses of different imaging modalities in detecting CAD and learn about the incremental value of these imaging modalities beyond risk calculators.*

- 09:00 Measuring coronary calcium scores
- 09:15 Searching for vulnerable plaques with coronary CTA?
- 09:30 Looking at coronary plaque biology with PET?
- 09:45 Clinical risk calculators - Are imaging modalities an added cost or an added value?

**How-to Session Room 2**

09:00 - 10:00

**How to perform and interpret cardiac PET studies?**

*To understand how to perform cardiac PET studies.*

*To better understand the preparation of patients, acquisition protocols and image interpretation of cardiac PET studies.*

- 09:00 Myocardial blood flow
- 09:15 Viability
- 09:30 Cardiac inflammation
- 09:45 Cardiac infection

**Young Investigator Award Room 3**

09:00 - 10:00

**Young Investigator Awards**

*The programme Chairpersons will introduce and discuss the abstracts submitted and chosen for Young Investigators Award*

**Symposium Room 1**

11:00 - 12:30

**Women for women - Debates on non invasive imaging**

*This is a 90 minutes symposium that focuses on diagnostic and prognostic testing in women as a special population that has atypical presentation, delayed diagnosis and therapies implementation and potentially higher risks with lower diagnostic yield when using ionizing radiation.*

- 11:00 Myocardial perfusion imaging in women State-of-the-evidence
- 11:18 CT coronary anatomy and/or function?
- 11:36 Stress Echocardiography in women
- 11:54 What stress test do I order in females for risk stratifications and management? An interventionalist and practicing preventive cardiologist perspective
- 12:12 Women for women - Debates on non invasive imaging - Panel discussion

**How-to Session Room 2**

11:00 - 12:30

**How to assess acute chest pain in the emergency room**

*With the introduction of various biomarkers and risk calculators, there is currently a major re-evaluation of the value of traditional testing modalities involving myocardial and coronary imaging for the diagnosis and triage of chest pain. This session will update the audience on the status of the field and what roles SPECT, PET, Echo and CT can still play in the modern practice.*

- 11:00 Changing role of non-invasive imaging in the era of high sensitive cardiac troponins?
11:18  Coronary CT angiography in acute chest pain: the evidence
11:36  MPI in suspected acute chest pain
11:54  Integrating of imaging into the clinical work up
12:12  How to assess acute chest pain in the emergency room - Panel discussion

11:00 - 12:30  SYMPOSIUM  Room 3

Role of imaging to identify high-risk patients with aortic valve stenosis

To understand how to identify high-risk patients with AVS with imaging,
To better understand the imaging biomarkers associated with fast progression of AVC and deleterious cardiac remodeling.

11:00  Clinical and echocardiography
11:18  Computed tomography
11:36  Positron emission tomography
11:54  Cardiac MRI in aortic valve stenosis
12:12  Panel discussion

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Sunday 12 May 2019 - Afternoon

14:00 - 15:30  SYMPOSIUM  Room 1

Lessons from imaging trials in stable coronary artery disease

The audience will be introduced to the lessons learned from the last 5 years in imaging based cardiac clinical trials and how these trials inform our daily clinical decision making and practice.

14:00  Coronary CTA for diagnosis and disease progression - From EVINCI to SMARTool
14:10  CMR is better? The CE-MARC trials
14:20  PACIFIC trial
14:30  The role of myocardial perfusion imaging in CAD - Is ISCHEMIA the answer?
14:40  Panel discussion - Part 1
14:50  The CRESCENT in a non invasive PLATFORM to detect obstructive disease?
15:00  Combining coronary anatomy and perfusion - A CORE(320) CT business?
15:10  May imaging improve outcome? PROMISE and SCOT-HEART
15:20  Panel discussion - Part 2

14:00 - 15:30  SYMPOSIUM  Room 2

What is new in the guidelines for stress testing?

ASNC has introduced its new SPECT guidelines with major updates. Each speaker is tasked with covering their assigned topic as related to these guidelines. The purpose is to put these guidelines into daily practice to improve care delivery and outcomes.

14:00  Introducing the guidelines
14:18  Basic principles of stress testing - When do you know that the stress test is “adequate”?  
14:36  How to integrate ECG changes with imaging?
14:54  Pharmacologic stress agents with and without adjunctive exercise
15:12 Effective management of stress lab emergencies

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<th>Time</th>
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<tr>
<td>14:00 – 15:30</td>
<td><strong>SYMPOSIUM</strong> Room 3</td>
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<td></td>
<td>Imaging in CAD difficult challenges - Chronic total occlusion</td>
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<td>Joint session with the Asian Society of Cardiovascular Imaging (ASCI)</td>
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<td><strong>To understand how to select patients for CTO.</strong></td>
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<td><strong>To better understand the best strategy to identify patients the most likely to benefit from CTO.</strong></td>
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<td>14:00</td>
<td>Chronic total occlusions - Worthwhile to revascularise?</td>
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<td>14:18</td>
<td>Radionuclide imaging (perfusion and viability)</td>
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<td>14:36</td>
<td>Role of imaging before revascularisation of chronic total occlusion - Cardiac MRI</td>
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<td>14:54</td>
<td>Cardiac CTA prior to CTO revascularisation</td>
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<tr>
<td>16:30 – 17:30</td>
<td><strong>SYMPOSIUM</strong> Room 1</td>
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<td>Hybrid/Fusion imaging - The new frontier in cardiovascular imaging?</td>
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<td><strong>To understand the technical background and challenges of hybrid and fusion cardiac imaging. To get an update on the possible clinical use to cover unmet needs in cardiology.</strong></td>
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<td>16:30</td>
<td>Hybrid and fusion imaging - Technical background</td>
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<td>PET/CT and SPECT/CT - Which indications?</td>
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<td>PET/MRI - Present or future?</td>
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<td>The dream (or myth) of the one-stop-shop</td>
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<tr>
<td>16:30 – 17:30</td>
<td><strong>HOW-TO SESSION</strong> Room 2</td>
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<td>Assessment of LV and RV function</td>
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<td><strong>To understand how left and right ventricular function can be assessed.</strong></td>
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<td><strong>To better understand the differences between the different available techniques for the assessment of left and right ventricular function.</strong></td>
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<td>16:30</td>
<td>How to do I perform and interpret LV and RV function with cardiac radionuclide imaging?</td>
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<td>16:45</td>
<td>How to do I perform and interpret LV and RV function with cardiac MRI?</td>
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<td>17:00</td>
<td>Chemotherapy-induced cardiotoxicity: echo, RNA or CMR?</td>
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<td>17:15</td>
<td>Cardiomyopathies: echo, RNA or CMR?</td>
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<td><strong>HOW-TO SESSION</strong> Room 3</td>
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<td>Detecting device infection - Case driven</td>
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<td><strong>Multi-modality approach in endocarditis</strong></td>
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<td>Prosthetic valves</td>
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<td>17:00</td>
<td>CIED / LVAD</td>
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<td>17:15</td>
<td>Impact of multimodality -imaging in clinical decision making</td>
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<td>17:30 – 18:30</td>
<td><strong>SPECIAL EVENT</strong> Room 1</td>
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<td>Inaugural session</td>
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### Monday 13 May 2019 - Morning

#### Room 1

**09:00 - 10:00**

**SYMPOSIUM**

**SPECT or PET for myocardial perfusion imaging?**

_This session will expose the audience to the added value of PET over SPECT within the limitations of availability, cost, and clinical indication._

- 09:00 Choice based on the facility?
- 09:15 Choice based on the clinical indication?
- 09:30 Choice based on the cost?
- 09:45 What will be the choice in the future?

#### Room 2

**09:00 - 10:00**

**READ WITH THE EXPERTS**

**How to perform a good cardiac CT exam and report?**

_This session will walk the audience through the process of preparing a patient for cardiac CT scan, performing and analysing the tests. The audience will also learn about the limitations of this test and when it should not be performed._

- 09:00 For the evaluation of coronary arteries and by-pass
- 09:15 For the evaluation of valvular disease
- 09:30 For the evaluation of structural heart diseases
- 09:45 Which patient I would not choose for CT angiography?

#### Room 3

**09:00 - 10:00**

**SYMPOSIUM**

**From imaging trials to clinical practice**

_To understand the appropriate use of cardiac imaging and the process of implementing evidence from imaging research into clinical guidelines._

- 09:00 Clinical use and misuse of nuclear cardiology
- 09:15 Clinical use and misuse of cardiac CT
- 09:30 Nuclear cardiology and cardiac CT in EU guidelines
- 09:45 Nuclear cardiology and cardiac CT in US guidelines

#### Room 1

**11:00 - 12:30**

**SYMPOSIUM**

**Non-invasive imaging strategies in heart failure**

_To understand the role of imaging in the evaluation of patients with HF To better understand the clinical indications and impact on patient care of the different imaging modalities_  

- 11:00 When and how should I look for myocardial ischaemia and viability?
- 11:18 When and how should I look for fibrosis on cardiac MRI?
- 11:36 When and how should I look for dyssynchrony?
- 11:54 When and how should I look for cardiac innervation?
- 12:12 Panel discussion

#### Room 2

**11:00 - 12:30**

**SYMPOSIUM**

**How to perform functional assessment of CAD with CT?**

_Joint session with the Society of Cardiovascular Computed Tomography (SCCT)_

_Cardiac CT is being proposed as a one stop shop for anatomy and functional assessment. This session will walk the audience through the process of analysing the CT data to generate a clinically meaningful and actionable interpretation to guide the clinical management._

- 11:00 CT-FFR - Are all approaches comparable?
- 11:18 CT-FFR - What is the clinical evidence?
- 11:36 How to integrate functional information with CT coronary anatomy?
11:00 - 12:30 HOW-TO SESSION Room 3

How to deal with discordant test results in CAD?
In clinical practice, a perfect match and concordance among the results of different imaging modalities is not the norm. This session will simulate real cases of discordance and conflicting test results and walks the audience through the process of reconciliation of these results or favouring one test over another.

11:00  Discordant tests results in CAD: is there a role for myocardial blood flow?
11:18  Obstructive CAD at coronary CT angiography and negative MPI
11:36  Normal or non obstructive CAD at CT angiography and positive MPI
11:54  Asymptomatic patient with positive MPI
12:12  Discordant coronary angiography and MPI - Which vessel do I treat?

Monday 13 May 2019 - Afternoon

14:00 - 15:30 SYMPOSIUM Room 1

Lessons from cardiac imaging trials and unmet needs
To get an update on the most important recent or ongoing large-scale imaging trials. To understand how their results may affect clinical practice.

14:00  Primary prevention of CVD - The role of imaging
14:12  Imaging-guided strategies in stable IHD
14:24  Valve disease and transcatheter valvular interventions
14:36  Cardiac resynchronization therapy
14:48  Unmet needs in cardiac imaging trials

14:00 - 15:30 READ WITH THE EXPERTS Room 2

Live reads from the Cleveland Clinic
Essential Elements of a SPECT and PET reports: how to convey the risk and guide therapy?
4 SPECT and 4 PET cases to be reported Live using our reporting system at Cleveland clinic to integrate clinical, ECG, perfusion, gated and CT data.
This will be an interactive session demonstrating how SPECT and PET cases are interpreted at the Cleveland Clinic with step-by-step guidance on what goes into the report and gets to the ordering physician.

14:00  Case 1
14:45  Case 2

14:00 - 15:30 SYMPOSIUM Room 3

Which role for a multimodality “imaging heart team”?
To understand the potential role of imaging heart team in different cardiological scenarios.

14:00  Cardio-oncology
14:18  Endocarditis
14:36  Paediatric and congenital heart diseases
14:54  Planning cardiac interventions
15:12 Which are the organization challenges?

16:30 - 17:30 SYMPOSIUM Room 1

Imaging to guide therapy
Joint session with the Society of Nuclear Medicine and Molecular Imaging (SNMMI)

To understand the role of imaging in guiding therapies.
To better understand how imaging can identify the presence and severity of the disease and help to monitor the effects of therapies.

16:30 Cardiac sarcoidosis
16:45 Cardiac amyloidosis
17:00 Inflammation in atherosclerotic plaques
17:15 Microvascular disease

16:30 - 17:30 SYMPOSIUM Room 2

Cardiac CT - Beyond coronary arteries
Joint session with the European Society of Cardiovascular Radiology (ESCR) and the European Society of Radiology (ESR)

16:30 Imaging of aortic disease and peripheral vascular disease
16:45 Imaging of valvular disease
17:00 Imaging of congenital heart disease
17:15 Incidental cardiac and extracardiac findings

16:30 - 17:30 READ WITH THE EXPERTS Room 3

Interpreting and reporting difficult cases in nuclear cardiac imaging

16:30 Cardiac amyloidosis
16:45 Cardiac sarcoidosis
17:00 Device infection
17:15 Viability
Tuesday 14 May 2019 - Morning

09:00 - 10:00 SYMPOSIUM Room 1

Myocardial flow reserve

*Non-invasive measurement of CFR is now being done using CT, MR and PET. This session will introduce the limitations of traditional SPECT and demonstrate the incremental value of advanced CFR with PET and FFR with CT.*

09:00 Assessment of coronary physiology - A perspective of interventional cardiology

09:12 SPECT perfusion: Is it good enough?

09:24 PET perfusion - Beyond what the eye can see?

09:36 Cardiac CT perfusion and (FFR-CT - The time is now

09:48 Panel discussion

09:00 - 10:00 READ WITH THE EXPERTS Room 2

Imaging heart teams context

*To learn the role of Imaging Heart Team discussion to best manage controversial clinical cases*

09:00 Case 1 - Ischaemic heart disease

09:10 Case 2 - Cardiomyopathy

09:20 Imaging heart team 1

09:30 Case 3 - Endocarditis

09:40 Case 4 - TAVR

09:50 Imaging heart team 2

09:00 - 10:00 SYMPOSIUM Room 3

How to reduce radiation exposure for nuclear and CT cardiac imaging?

09:00 Current status and new challenges

09:12 SPECT

09:24 PET

09:36 CT

09:48 Panel discussion

11:00 - 12:30 SYMPOSIUM Room 1

New technologies in cardiac CT and nuclear cardiology

*To discover the latest developments in cardiac CT and nuclear cardiology. To describe the recent technological developments, new radiotracers and software for image processing and how they could improve patient care.*

11:00 Cardiac CT (FFR-CT, perfusion)

11:22 SPECT (CZT)

11:45 PET (MBF, new radiotracers)

12:07 Image processing (artificial intelligence, radiomics)

11:00 - 12:30 SYMPOSIUM Room 2

How nuclear and CT cardiac imaging may impact on clinical and economic outcomes

*To understand how the use of cardiac imaging modalities to stratify the patient risk and to guide downstream management could improve patient’s outcome and reduce inappropriate costs in specific clinical scenarios.*

11:00 Management of stable CAD

11:18 Management of heart failure

11:36 Management of arrhythmias
11:54  Integrating biomarkers of risk

12:12  The present and future of outcome research in imaging

11:00 - 12:30  SYMPOSIUM  Room 3

Current role of imaging in sarcoidosis and vasculitis
To learn the role of imaging for the diagnosis of cardiac sarcoidosis and active vasculitis and the monitoring of the efficacy of immunosuppressive therapies.

11:00  Sarcoidosis - Clinical perspective (+US)
11:22  Sarcoidosis - Which role for imaging (MRI + PET)?
11:45  Vasculitis - Clinical perspective
12:07  Vasculitis - Which role for imaging (CTA, PET)?