**NACP 2014 SYMPOSIUM 24 – 25.5 2014:**
(joint with PET Symposium 25-27.5.2014)

**FINAL PROGRAM**

**SATURDAY 24.5.2014** Theme "Imaging in Oncology"

09.00 – 10.00 Registration with coffee and snacks

<table>
<thead>
<tr>
<th>Session 1 10.00 – 12.30</th>
<th>Opening and Welcome</th>
<th>NACP and Acta Oncologica</th>
<th>State of PET/MR</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Mika Teräs, FI</td>
<td>Ludvig Muren, DK</td>
<td>Jon Shah, DE</td>
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</tbody>
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**Nordic Vision**

<table>
<thead>
<tr>
<th>Norway</th>
<th>Role of dynamic imaging in oncology</th>
<th>Eirik Malinen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland</td>
<td>MR in external beam RT planning</td>
<td>Tiina Seppälä</td>
</tr>
<tr>
<td>Denmark</td>
<td>Styles of ART: Adaptive Radiotherapy</td>
<td>Ludvig Muren</td>
</tr>
<tr>
<td>Sweden</td>
<td>Particle Therapy, Uppsala experiences</td>
<td>Håkan Nyström</td>
</tr>
</tbody>
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12.30 – 13.30 Lunch

<table>
<thead>
<tr>
<th>Session 2 13.30- 15.15</th>
<th>The best abstract from each country, a mix of RT and diagnostics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway</td>
<td>Pharmacokinetic modeling of dynamic 18F-Choline PET reflects choline metabolism in breast carcinoma xenografts</td>
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<tr>
<td>Finland</td>
<td>PET/CT in diffuse large B-cell lymphoma predicts tumor aggressiveness and chemotherapy response</td>
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<tr>
<td>Denmark</td>
<td>Early experiences from clinical trial of daily adaptive plan selection in radiotherapy for urinary bladder cancer</td>
</tr>
<tr>
<td>Sweden</td>
<td>Cell survival and Tumour control probability for hypofractionated stereotactic treatments – a comparison between LQ and USC models</td>
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</tbody>
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14.30 – 15.15 NACP award reports

| Brachytherapy of partial breast, experience from Moores Cancer Centre | Päivi Arponen-Estevés |
| Utilization of Monte Carlo methods in external beam RT quality assurance | Jarkko Ojala |

15.15 – 15.45 Coffee and posters

**General assemblies** 15.45 -17.00

Nordic physicist meetings

**Get-together** 17.00 – 19.00

Gadolin lecture: Radionuclides in Imaging and Radiotherapy

opening of the exhibition with apetizers

**NACP dinner** 19.30 – 23.00 Academy Hall (near Turku Cathedral)

Best Poster Award

Announcement of the winner of the NACP Varian award 2014

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NACP COUNCIL: President: Mika Teräs • Secretary: Sigrun Saur Almberg
Treasurer: Cathrine Jonsson
Webmaster: Mika Teräs /Asger Grevval Petersen • Delegate: Gardar Myrdal •
Task groups: Radiological Physics Committee

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www.nacp-nordisk.org  E-mail: NACP-webmaster@nacp-nordisk.org
SUNDAY 25.5.2014

**session 4a 9.00 - 10.15 (parallel with 4b) New technologies in Radiation Therapy**
Selected oral presentations with discussion in each of the parallel sessions

**THE IMPACT OF CBCT RECONSTRUCTION AND CALIBRATION FOR DOSE CALCULATION IN RADIOTHERAPY OF THE HEAD AND NECK REGIO**
Ulrik Vindelev Elström

**CLINICAL USE OF ITERATIVE 4D CBCT RECONSTRUCTIONS TO INVESTIGATE LUNG TUMOR MOTION**
Mai Lykkegaard Schmidt

**DYNAMIC FLATTENING FILTER FOR FFF BEAMS**
Hunor-Jeno Benedek

**COMPARISON BETWEEN CONVENTIONAL AND FFF BEAMS FOR VMAT OF VARIOUS TREATMENT SITES AND PLAN COMPLEXITIES**
Adam Peter Daniel Gasic

**EVALUATION OF CHANGES IN WATER EQUIVALENT PATH LENGTH IN PROTON THERAPY FOR LUNG CANCER USING 4D-CT**
Oscar Casares

**session 4b 8.30 - 10.15 (parallel with 4a) MRI in Radiation Therapy**
Selected oral presentations with discussion in each of the parallel sessions

**EVALUATION OF QUANTITATIVE ACCURACY OF THE PHILIPS INGENUITY-TF PET/MR**
Jens Maus

**A MODEL TO PREDICT INTRA-FRACTIONAL CHANGES IN ADAPTIVE RADIOTHERAPY FOR BLADDER CANCER**
Caroline Groenborg

**MRI-BASED RADIOTHERAPY TREATMENT PLANNING OF PROSTATE CANCER DOSE CALCULATION ACCURACY IN DUAL MODEL HU CONVERSION PSEUDO-CT IMAGES**
Juha P. Korhonen

**ANATOMY-DEVIATION RELATED DOSE-DISTRIBUTION ERRORS IN CT/MR-PLANNED PROSTATE VMAT**
Eva Onjukka

**TRACER MODEL SELECTION FOR DYNAMIC CONTRAST-ENHANCED MAGNETIC RESONANCE IMAGING OF LOCALLY ADVANCED CERVICAL CANCER**
Jesper Kallehauge

**EVALUATION OF DIFFERENT MATHEMATICAL MODELS FOR DIFFUSION WEIGHTED MR IMAGING OF PROSTATE CANCER (30 min)**
Ivan Jambor

10.15 – 10.45 Coffee break
SUNDAY 25.5.2014

**session 5a 10.45 - 12.30** (parallel with 5b) **Treatment planning in Radiation Therapy**
Selected oral presentations with discussion in each of the parallel sessions

**THE COMPOSITE OBJECTIVE VALUE – A USEFUL PARAMETER FOR CHOOSING OPTIMAL FALBACK RADIOTHERAPY TREATMENT TECHNIQUE**  
Kristoffer Petersson

**DOSIMETRIC AND RADIOBIOLOGICAL EVALUATION OF MANUALLY AND INVERSELY OPTIMIZED BRACHYTHERAPY TREATMENT PLANNING**  
Oscar Ardenfors

**ISOCENTRIC INTEGRATION OF IMRT AND ELECTRON FIELDS IMPROVES FIELD JUNCTION DOSE UNIFORMITY IN POSTMASTECTOMY RADIOTHERAPY**  
Pauliina Wright

**CT-PLANNED INTERNAL MAMMARY NODE RADIOTHERAPY IN THE DBCG-IMN STUDY: BENEFIT VERSUS POTENTIAL HARMFUL EFFECTS**  
Lise Bech Thorsen

**DOISMETRIC AND RADIOBIOLOGICAL EVALUATION OF MANUALLY AND INVERSELY OPTIMIZED BRACHYTHERAPY TREATMENT PLANNING**  
Oscar Ardenfors

**ESTIMATION OF ORGAN SPECIFIC CANCER RISK FOLLOWING PAEDIATRIC CRANIO-SPINAL IRRADIATION WITH ELECTRON, PHOTON AND PROTON THERAPY**  
Camilla Hanquist Stokkevåg

**CORRELATION BETWEEN ORGAN AT RISK VOLUME AND DOSE LEVEL-BASED VOLUME IN HIGH-DOSE PROSTATE RADIOTHERAPY**  
Assi Valve

**session 5b 10.45 – 12.30** (parallel with 5a) **Nuclear Medicine physic**
Selected oral presentations with discussion in each of the two parallel sessions

**STANDARDISATION OF ONCOLOGICAL PET/CT STUDIES - EANM EARL (30 min)**  
Ronald Boellaard

**REPRODUCIBILITY OF DYNAMIC 18F-FDG-PET DATA IN BREAST CANCER XENOGRAFTS**  
Kathinka Pitman

**REMOTE RADIATION MONITORING OF PATIENTS AFTER POST-THYROECTOMY RADIATION TREATMENT**  
Mikko Tenho

**THE EFFECT OF RESPIRATORY GATING AND REDUCED STATISTICS ON PEAK AND MAXIMUM SUV EVALUATION**  
Tuomas Koivumäki

**AVANTOMOGRAPHY: A COMPACT, MULTIPURPOSE PET DEMONSTRATOR**  
Defne Us

**DESIGN AND PERFORMANCE CHARACTERISTIC OF DIGITAL PHOTON COUNTING BASED WHOLE BODY PET/CT SCANNER**  
Antonis Kalemis

12.30 – 13.30 Lunch
SUNDAY 25.5.2014

INSTRUMENTATION AND MODELLING 13.30 – 16.30

**session 6 Instrumentation** joint NACP + PET

*Invited speaker* Multimodality imaging in oncology Jörg van den Hoff, Dresden, DE

Selected oral presentation
MONTE CARLO SIMULATIONS FOR IN-BEAM PET MONITORING IN HADRON THERAPY Francesco Pennazio

**session 7 Modelling** joint NACP + PET

*Invited speaker* Cluster-input Ronald Boellaard, A’dam, NL

*Invited speaker* Perfusion Approach Hidehiro Iida, Osaka, JP

Selected oral presentations

A DATA-DRIVEN METHOD FOR AUTOMATIC EXTRACTION OF A REFERENCE TISSUE KINETIC FROM [11C]-(R)-PK11195 RODENT BRAIN SCANS S Sridharan

LYMPHOMA THERAPY ASSESSMENT WITH THE CHANNELER ANT MODEL Piergiorgio Cerello

18.15 – 23.00 Sauna Party

Metsä Jukola, Naantali

Sunday, 25 May, at 18.15 (bus transportation from hotels)

Free participation for NACP and PET symposium delegates, ticket 30 euros for accompanying persons: Pre-registration needed for all.

A traditional and very popular Sauna Party will be held on Sunday evening at Metsä-Jukola in Naantali. During the evening you can bathe in sauna, swim in the sea, enjoy the beautiful scenery of archipelago and take part in different outdoor games. Buffet dinner is included.