The complex pathophysiology of cardiovascular calcification

Learning from similarities and differences across rare- and acquired disease types

A 2-day symposium focussing on cardiovascular calcification from different perspectives:

1. Monogenic rare disease ethiology
   EuroSofCalcNet COST Action
2. Calcifylaxis
   EuCalNet: www.calciphylaxis.net/eu/welcome
3. Intima Calcification in Atherosclerosis
   EJD project “Intricare“: www.intricare.eu
4. CKD-related arteriosclerosis

Objectives of the symposium

1. Sharing knowledge about cardiovascular calcification among basic researchers, clinicians and industry.
2. Facilitating multidisciplinary & translational research across different presentations of vascular calcification.
3. Brainstorming on ideas and funding channels for novel collaborative research proposals.
4. Offering learning and networking opportunities for junior researchers (open call for abstracts).

Venue

University of Antwerp
Grauwzusters Chapel
Lange Sint-Annastraat 7
2000 Antwerpen

Organising Committee

Prof. Pieter-Jan Guns
Prof. Anja Verhulst
Prof. Guido De Meyer
Prof. Patrick D’Haese
University of Antwerp

Registration


Dec 2-3, 2019
Monday and Tuesday
Antwerp, Belgium
Grauwzusters Monastery

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No CA16115.
Dec 2-3, 2019 (Monday and Tuesday)  
Grauwzusters Monastery, Antwerp  
Lange Sint-Annastraat 7, 2000 Antwerpen

**Program**

### Day 1: Monday December 2nd 2019

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<tr>
<th>Time</th>
<th>Session</th>
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<tr>
<td>08:30</td>
<td>Arrival and registration with coffee/tea</td>
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</table>
| 09:00  | Maria Eriksson, Karolinska Institut  
*Somatic mutations and possible contribution to vascular tissue damage in chronic kidney disease* |
| 09:40  | Olivier Vanacker, Ghent University  
*Molecular genetics of vascular calcification: causal genes and beyond* |
| 10:20  | Vincent Brandenburg, RWTH Aachen  
*Clinical presentation of calcifylaxis and recent developments* |
| 11:00  | Coffee/tea break                                                        |
| 11:30  | Cathy Shanahan, King’s College London  
*Unravelling molecular mechanisms of vascular calcification* |
| 12:00  | Georges Leftheriotis, University Hospital Nice  
*Vascular calcifications: How to quantify?* |
| 12:30  | Patrick D’Haese/Anja Verhulst, University of Antwerp  
*Arterial calcifications: can we inhibit them without affecting the bone?* |
| 13:00  | Lunch                                                                   |
| 14:00  | Carolina Salcedo, Sanifit  
*Calcifylaxis and beyond: SNF472 as a new approach to treat calcification disorders* |
| 14:30  | Guido De Meyer/Pieter-Jan Guns, University of Antwerp  
*Arterial calcification and stiffness* |
| 15:00  | Ofer Sarig, Tel Aviv Medical Center  
*The molecular basis for ectopic calcification in the skin* |
| 15:30  | Coffee/tea break                                                        |
| 16:00  | Magnus Bäck, Karolinska Institut  
*Valve calcification and cancer treatments* |
| 16:20  | Flora Szeri, Natural Sciences, Hungary  
*Longitudinal monitoring of PPI levels* |
| 16:40  | Joachim Jankowski, RWTH Aachen  
*Identification of novel inhibitors of vascular calcification* |
| 17:00  | Andras Varadi, Natural Sciences, Hungary  
*Toward the oral pyrophosphate theory in PXE* |
| 17:20  | Antonia Schantl, ETH Zürich  
*Inhibition of vascular calcification by novel functionalized inositol phosphates* |
| 17:40  | Isabel Orriss, Royal Veterinary College London  
*Extracellular pyrophosphate: More than just a calcification inhibitor?* |
| 18:00  | Closure of the day                                                       |
| 18:30  | Dinner at Universiteitsclub                                              |

### Day 2: Tuesday December 3rd 2019

<table>
<thead>
<tr>
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<tr>
<td>08:30</td>
<td>Arrival with coffee/tea</td>
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</table>
| 09:00  | Peter Stenvinkel, Karolinska Institut  
*Premature ageing: lessons from chronic kidney disease and the animal kingdom* |
| 09:30  | Pieter Evenepoel, KU Leuven  
*The bone-vascular axis: focus on sclerostin* |
| 10:00  | Lu Lu Dai, Karolinska Institut  
*Aortic valve calcium associates with all-cause mortality in patients with end-stage renal disease* |
| 10:15  | Audrey Laurain, University Hospital Nice  
*Pyrophosphate in chronic kidney disease* |
| 10:45  | Gonzalo Artiach, Karolinska Institutet  
*Fatty acids and valve calcification* |
| 11:00  | Coffee/tea break                                                        |
| 11:30  | Vicky Macrae, University of Edinburgh  
*The role of osteocalcin in vascular calcification* |
| 11:50  | Hervé Kempf, University of Lorraine  
*Gla proteins in cardiovascular calcification* |
| 12:10  | Tamas Aranyi, Natural Sciences, Hungarian Ac Sc  
*Incomplete penetrance in ectopic calcification* |
| 12:30  | Lunch *Including poster session*                                         |
| 14:00  | Claudia Goettsch, RWTH Aachen  
*Role of extracellular vesicles and intracellular sorting in vascular calcification* |
| 14:30  | Frank Rutsch, Münster University Children’s Hospital  
*Generalized arterial calcification of infancy: results of the natural history studies* |
| 15:00  | Lucie Bourne, Royal Veterinary College London  
*L-cysteine and hydrogen sulphide in the effects of N-acetylcycteine on arterial calcification and bone formation* |
| 15:15  | Britt Opdebeeck, University of Antwerp  
*indoxyl sulfate and p-cresyl sulfate promote vascular calcification and associate with glucose intolerance* |
| 15:30  | Willi Jahnem-Dechent, RWTH Aachen  
*Mud in the blood: protein-mineral complexes in mineralization and calcification* |
| 15:45  | Annelies De Maré, University of Antwerp  
*Sclerostin as regulating molecule in the bone-vascular axis* |
| 16:00  | Closure                                                                 |