



WEDNESDAY, 21 January 2026

17.30 – 19.30 **Welcome Drinks at the conference location: Hilton Hotel, Weena 10, Rotterdam
+ Registration**

THURSDAY, 22 January 2026

08.00 – 09.00 **Registration + Coffee**

Oral program

09.00 – 09.10 **Introduction and opening Klazina Kooiman & Rik Vos**

09.10 – 10.20 **CLINICAL IMAGING Chairs: Folkert ten Cate & Annemien van den Bosch**
 Olivier Couture (Inv.) Ultrasound Localization Mesoscopy: Imaging individual functional units in deep organs
 Erik Groot Jebbink (Inv.) Towards contrast enhanced ultrasound-guided radioembolization
 Ferenc Kandi CEUS-based dispersion analysis of in-vivo healthy uteri during the menstrual cycle
 Georges Chabouh Bedside three-dimensional acoustic angiography and perfusion monitoring in aneurismal subarachnoid hemorrhage

10.20 – 11.45 **Coffee & poster session A**

11.45 – 12.25 **THERAPY: TOWARDS CLINICAL USE I Chairs: Liza Villanueva & Olivier Couture**
 Catharina de Lange Ultrasound-mediated delivery of drug to tumors
 Davies (Inv.) Drug delivery to the brain: Cellular and Therapeutic Effects of Ultrasound and Microbubbles Microscopy

12.25 – 12.55 **KEYNOTE LECTURE DUTCH HEART FOUNDATION Chair: Rik Vos**
 Jonathan Lindner (Inv.) Improving Cardiovascular Health Through the Clinical Translation of the Latest Contrast Ultrasound Technologies

13.00 – 14.15 **LUNCH**

14.15 – 15.30 **THERAPY: TOWARDS CLINICAL USE II Chairs: Mark Borden & Catharina de Lange Davies**
 Flordeliza Villanueva Microbubble cavitation induces Ca²⁺ influx via mechano-sensitive channels leading to activation of eNOS signaling and transient gene expression changes
 Francois Yu Leveraging ATP release by UTMIC elicits a strong cellular and cytokine immune response in combination with aPDL1 in a murine colorectal cancer model
 Eleanor Stride Antimicrobial-loaded ultrasound-responsive agents (AURAs) for treatment of wound infections
 Muhammad Wahab Amjad Ultrasound Targeted Fatty Acid Nitroalkene (CP8)-Loaded Microbubbles for the Treatment of Triple Negative Breast Cancer
 Jeffrey Bamber Evaluation of the immunostimulatory potential of Acoustic Cluster Therapy (ACT®) in melanoma and breast cancer models in mice

15.30 – 16.00 **Intermission**

16.00 – 17.05 **BUBBLE TECHNOLOGY Chairs: Michel Versluis & Eleanor Stride**
 Mark Borden (Inv.) Tuning Microbubble Resonance for Radiation-Force Assisted Targeting
 Nicholas Ovenden Non-equilibrium Vaporisation Dynamics of Superheated Phase-Change Contrast Agents: Simulations vs Experiments
 Ines Oberhuber Impact of perfluorocarbon nanodroplet fabrication and ADV definition on reported ADV thresholds: toward reproducible and physiologically relevant vaporization.....
 Niladri Satpathi Negative Surface Tension of Coated Bubbles

18.30 – 22.00 **CONFERENCE DINNER: Cornelis Kitchen & Bar, Stadhuisplein 3, Rotterdam**

Organised by: **Rik Vos, Klazina Kooiman, Annemien van den Bosch, Folkert ten Cate, Nico de Jong**
Scientific board: **Mike Averkiou, Mark Borden, Olivier Couture, Beat Kaufmann, Eleanor Stride, Flordeliza Villanueva**



FRIDAY, 23 January 2026

07.30 – 08.00 Registration + Coffee and breakfast bite

Oral program

08.00 – 09.20 PARALLEL SHORT ORAL SESSIONS

09.20 – 09.40 Intermission

09.40 – 11.00 **NEW DIRECTIONS** Chairs: Dan Adam & Ton van der Steen

Jason Voorneveld (Inv.) 4D Contrast Enhanced Ultrasound of the Heart and Brain
 John Hossack In vivo Validation of High-Resolution Ultrasound Molecular Imaging via Incremental Burst Sequence
 Mike Averkiou Turning Up the Heat: Microbubbles as Powerful Amplifiers of HIFU Energy
 Reza Bahrami Gorji Radiation-induced vaporization of mixed-core nanodroplets at body temperature for ultrasound-based photon dosimetry
 Meng Chen Michelle Li Measurement of ultrasound-responsive microbubble perfusion during non-union bone fracture healing

11.00 – 12.30 Coffee & poster session B

12.30 – 13.45 LUNCH

13.45 – 14.15 **KEYNOTE LECTURE** Chair: Klazina Kooiman

Hong Chen (Inv.) Sonobiopsy: A Journey from Bench to Bedside

14.15 – 14.30 Intermission

14.30 – 16.00 **COMPETITION** Chairs: Nico de Jong & Peter Burns

Henri Leroy Volumetric AM-SVD biomolecular contrast ultrafast ultrasound imaging
 Ashish Sivasdas Novel 3D convective-dispersion modeling of ultrasound-contrast-agent transport for imaging cancer angiogenesis
 Hugues Favre Super-resolution ultrasound imaging beyond the vascular space
 Thomas Else Statistical delineation of non-linear scatterers in 2D and 3D x-wave imaging for non-destructive and specific gas vesicle detection
 Anass Hameddine Multichannel end-to-end AI-based ultrasound super-resolution
 Ruchika Dhawan Ultrasound contrast agent detection is enhanced using chirp-coded subharmonic excitation and Volterra filtering

16.00 – 16.10 **CLOSING REMARKS** Klazina Kooiman & Rik Vos

16.10 **ANNOUNCEMENT OF THE WINNERS OF THE COMPETITION AND POSTER PRIZES**

+ FAREWELL DRINKS

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Poster session A, THURSDAY 22 January 2026

Thursday 10.20 – 11.45

NEW DIRECTIONS: CAVITATION NUCLEI, BUBBLE PHYSICS & IMAGINGChair: *Tim Segers*

Location: Conrad; with 2-minute poster pitches starting at 10.30

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| A1) Anastasia Sevcuic | Tunable Microbubble Stability in Polymeric Hydrogel Systems |
| A2) Elia Pascucci | Zinc oxide nanoparticles as ultrasound contrast agents and promoters of sonoluminescence-based imaging |
| A3) Aygül Zengin | Engineering Ultrasound-Responsive Therapeutic Antibubbles for Glioblastoma Therapy |
| A4) Jovana Katrinka Mavrak | Therapeutic Ultrasound-Mediated In Situ Generation Of Reactive Oxygen Species For Targeted Prodrug Activation |
| A5) Macy Vreman | Toward 'mono-acoustic' microbubbles: controlling shell microstructure formation |
| A6) Julie Schlederer | Formulation of Cationic Microbubbles combined with Focused Ultrasound for Blood-Brain Barrier Opening and Targeted Gene Delivery in the Brain |
| A7) Fleur Vialle | 3D finite-element model of an ultrasound-driven microbubble confined in an elastic capillary |
| A8) Leonardo Steinman | Quantitative Assessment of Cavitation from DEFINITY® and DEFINITY RT® |
| A9) Ruchika Dhawan | Ultrasound Image Segmentation of Histotripsy Ablation Using DeepLabV3 with Combined Dice-Focal Loss |
| A10) Ana-Alexandra Brad | 3D Radial Modulation Imaging |
| A11) Ruchika Dhawan | Reconstruction of microvasculature images from sparse data using a hybrid attention-based u-net architecture with transformer encoding |

Poster session B, FRIDAY 23 January 2026

Friday 11.00 – 12.30

NEW DIRECTIONS: THERAPY & DISEASE MONITORING/IMAGINGChair: *Mike Averkiou*

Location: Conrad; with 2-minute poster pitches starting at 11.10

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| B2) Eveline Dekker | Contrast-enhanced ultrasound in obstetrics, an effective and safe method to quantify human intervillous perfusion? |
| B3) Kishan S. Italiya | Flow-Dependent Adhesion of VCAM1-Targeted Microbubbles in Inflamed Endothelial Cells: Implications for MASH Imaging |
| B4) Krish Desai | Transcranial super-resolution ultrasound imaging as a tool to visualize neuronal activation patterns in the brain following peripheral administration of GLP-1 receptor agonist |
| B5) Adrien Rohfritsch | Generation of Cavitation in the Human Pancreas Using Focused Ultrasound Coupled with Contrast Agents: Proof of Concept on Perfused Anatomical Models |
| B6) Diana Ragaišė | Real-Time Cavitation Monitoring and Control Using RMS Feedback |
| B7) Manu K. Suma | Temporal evolution of nonlinear cavitation response in encapsulated microbubbles: effect of ambient conditions |
| B8) David Vallmanya Poch | Investigating out-of-plane detection in nonlinear sound sheet imaging of microbubbles |
| B9) Abigail Collins | Minimising Device Dependence of Cavitation Dosimetry |
| B10) Annemarie Linnenbank | Capillary model for ultrasound-triggered local drug delivery |
| B11) Shusei Kawara | Sorted Mono-sized Microbubbles for Blood-Brain Barrier Opening and 3D Super-Resolution Ultrasound Imaging |

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Parallel short oral sessions, FRIDAY 23 January 2026

08.00 – 09.20

PARALLEL SHORT ORAL SESSION I: BIOLOGY/CLINICALChair: *Klazina Kooiman*
Location: Le Jardin

- I.1) Ferenc Kandi & Sophie Dassen Towards Quantitative CEUS Assessments of Ex-Vivo Feto-Placental (Micro)Vasculature
- I.2) Davide De Grandi Bactericidal effect of ultrasound mediated low concentration antimicrobial treatment on a multi-species oral infection model..
- I.3) Lukas Giedrimas Ca²⁺ Sonoporation – a Novel Therapeutic Strategy for Cancer Treatment
- I.4) Eleanor Stride And then there were none? ... unravelling the mechanisms of sonodynamic therapy
- I.5) Estée Grandidier Biofabrication of a 3D perfusable vessel for USMB therapy
- I.6) Veronica Nordlund Ultrasound-mediated Delivery of Doxorubicin in Tumors: Impact of Drug Formulation and Mechanical Index.....
- I.7) Håkon Wesche Acoustic Cluster Therapy (ACT®) increases Anti-PD1 checkpoint inhibitor uptake in tumors in mice

08.00 – 09.20

PARALLEL SHORT ORAL SESSION II: TECHNOLOGYChair: *Rik Vos*
Location: Conrad

- II.1) Ge Zhang Harmonic Amplitude-Modulated Singular Value Decomposition for Ultrasound Ultrafast Imaging on Gas Vesicles
- II.2) Manu K. Suma Improving passive cavitation detection using a metallic metamaterial acoustic filter
- II.3) Meltem Lampe Tuning Subharmonic Scattering of Monodisperse Microbubbles for Noninvasive Pressure Sensing
- II.4) Jingwen Zhu Post-craniotomy Brain Deformation Assessed by Volumetric Ultrasound Localization Microscopy.....
- II.5) Hidde Sikkema Toward understanding the effect of shell microdomains on the acoustic response of individual microbubbles.....
- II.6) Gonzalo Collado Lara Simultaneous optic and acoustic recordings of single microbubbles in free space
- II.7) Akram Middyia Bound or Free? Acoustic Signatures of Monodisperse Microbubbles for Ultrasound Molecular Imaging.....

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