



Preliminary program

Wednesday 14 October

19:00 Welcome reception & Inaugural Talk

Bradley Nelson (ETH Zurich)
Clinically Ready Microrobots

Thursday 15 October

Translational Therapies & Medical Microrobotics

8:30 Registration

9:00 Welcome and opening remarks

9:10 Session 1 Advanced therapies and Nanomedicines

9:15 Keynote talk

Ander Izeta (IIS Biogipuzkoa)
Advanced therapies: from basic research to a paradigm change in clinical practice

9:50 – 10:50 Contributed talks

10:50 Coffee break & Posters

11:15 Session 2 Functional Materials for Nano-Microrobotics

11:20 Keynote talk

Salvador Pané (ETH Zurich)
Biomedical Magnetic Microrobots: A Materials Perspective

11:55 Invited talk

Ambarish Ghosh (IISc, Bangalore)
From Physics to Physiology with Magnetic Micro- and Nanobots

12:20 – 13:05 Contributed talks

13:05 Lunch & Posters & Tech demos open

14:10 Session 3 Medical Applications I

14:15 Keynote talk

Metin Sitti (Koç University)
Wireless medical milli/microrobots for theranostic applications

14:50 Featured talk

Hakan Ceylan (Mayo Clinic)
Preventive Endovascular Robots: A New Paradigm for Vascular Interventions

15:10 Featured talk

Giovanni Pittiglio (Worcester Polytechnic Institute)
Magnetic Robots for Cardiovascular Interventions



15:30 Coffee break & Posters

15:55 Session 4 In vivo Imaging

16:00 Invited talk

Veronica Iacovacci (Sant'Anna School of Advanced Studies)

Vision in Motion: a Perception-Action-Locomotion Framework for Medical Microrobots

16:25 Invited talk

Daniel Razansky (ETH Zurich)

In Vivo Optoacoustic Navigation of Labeled Microrobots and Cells for Image-Guided Therapy and Super-Resolution Angiography

16:50 Featured talk

Tian Qiu (DKFZ, Dresden)

Wireless Magnetic Localization of Microrobots Toward Clinical Interventions

17:10 Featured talk

Richard Nauber (TU Dresden)

Deep-Learning-Based Photoacoustic Feedback and Coded VCSEL Illumination for Translational Real-Time Microrobot Control

17:30 Contributed talk

17:45 Poster Session

19:00 Taste of Gipuzkoa Experience (Conference Networking dinner)

Friday 16 October Medical Microrobotics & Tech Transfer

9:00 Session 5 Cell-Based Microrobotics

9:05 Keynote talk

Li Zhang (CUHK)

Biophysics-informed design of biohybrid microrobots

9:40 Invited talk

Simone Schuerle (ETH Zurich)

Engineering Synthetic and Biohybrid Medical Microrobots for Targeted Delivery and Acoustic Sensing

10:05 – 10:35 Contributed talks

10:35 Featured talk

Rana Ajeeb (CIC nanoGUNE)

Magnetic CAR-TCell Microrobots to Enhance Cell Accumulation and Retention in Solid Tumors

10:55 Coffee break & Posters

11:20 Session 6 Medical Applications II

11:25 Invited talk

Wei Gao (Caltech)

Synthetic Medical Micro/Nanorobots for In Vivo Biomedical Applications



11:50 – 12:50 Contributed talks

12:50 Lunch & Poster

**14:10 Session 7
Medical Applications III**

14:15 Keynote talk

Daniel Ahmed (University of Bern)

Translating Ultrasound Microrobots and Microtechnologies from Preclinical Models towards Clinical Applications

14:40 – 15:10 Contributed talks

15:10 Coffee break

15:30 Keynote talk

Samuel Sánchez (ICREA/IBEC)

Therapeutics in Motion

16:05 Lightning start-up pitches

- Edison Genera (Movalife Microrobotics)
- Shanmukh Srinivas (Theranutilus)
- Javier Plou (Prospect Biotech)
- Cornel Dillinger (Artorg)
- Endika de la Iglesia (Gaiker Technology)
- Mato Knez (Novanano)

16:45 Awards / Wiley Intervention – Special Issue of the Conference

17:00 Matchmaking, brainstorming & roadmapping (Break-up groups on selected topics)

Tentative topics:

Group 1: From Lab to Patient: Clinical Translation of Medical Microrobots

What is needed to bring medical microrobots into first-in-human studies?

Group 2: Manufacturing, Scalability and Quality Assurance

How can we manufacture microrobotic technologies at clinically and commercially relevant scales?

Group 3: Regulatory Pathways and Market Access

How do we navigate regulation, reimbursement, and adoption?

Group 4: Synergies Between Medical Microrobotics and Advanced Therapies

How can microrobotics accelerate the clinical impact of cell, gene, and regenerative therapies?

Group 5: Innovation, Technology Transfer and Venture Creation

How do we transform promising research into successful clinical and commercial ventures?

18:00 Closing remarks

Visit to the Aquarium (included)