

Four Motors
for Europe
and Associates



Mission of the Four Motors for Europe to the Netherlands

(Noord-Brabant, South-Holland)
18-20 February 2019

Life science & health

The Four Motors for Europe was founded more than 30 years ago on the 9 September 1988 as a regional network between Auvergne-Rhône-Alpes, Catalonia, Lombardy and Baden-Württemberg. Today the Four Motors and Associated Partners (Wales and Flanders) stand for innovative regions with strong economies that position themselves internationally through joint missions and contacts.

Baden-Württemberg, as current presidency of the Four Motors, has proposed to their partners a joint mission to two of the most innovative regions in the Netherlands in two sectors: mobility and lifescience & health. With Europe's largest port in Rotterdam, a world-renowned Technical University in Delft and the Leiden BioSciencePark, the Province of **South Holland** is one of the driving forces of innovation in the biotech, logistics and e-mobility sectors. The Province of **North-Brabant** is the leading manufacturing region of the Netherlands. In recent years, it has developed as a high tech industry region with the Technical University of Eindhoven, Philips, VDL, ASML and other companies acting as driving forces. Key sectors here are green and smart mobility as well as medtech. In both regions, you will find a vibrant high tech start-up community and many cross sectoral initiatives such as living labs and field labs.

The delegation “**Life Sciences/Healthcare**” focusses on giving insights into the life science/ health care industry ecosystem in the Netherlands with the following main topics:

- Medical technology, medical robotics and minimal invasive surgery
- Life Science, Biotech and Diagnostics, with sub-focus on 3D-screening, Organ-on-chip-technologies and analytical techniques.



Auvergne-
Rhône-Alpes



Baden-Württemberg



Generalitat de Catalunya



Regione
Lombardia



Llywodraeth Cymru
Welsh Government

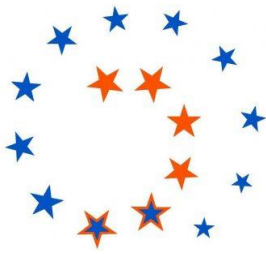


Flanders
State of the Art

Provincie Noord-Brabant



provincie
ZUID HOLLAND



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Program

4-Motors delegation to Noord-Brabant and South-Holland 18-20 February 2019

18 February

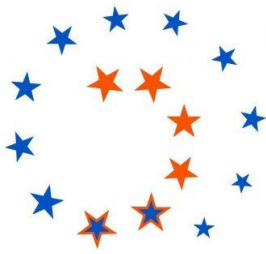
- 15.00 Arrival at the provincial headquarters
Brabantlaan 1, Den Bosch
- 15.00 – 17.30 Political Roundtable with Political Representatives of the Four Motors
and Associates:
**Conference on European collaboration on regional innovative
strategies**
(Participation of companies not expected but welcome)
- 17.45 – 18.00 Transfer
- 18.00 – 21.00 Reception at the Den Bosch city hall (Economic and Political
delegations)

LIFE SCIENCES TRACK BRABANT Brabant Development Agency



19 February

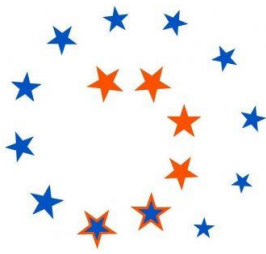
- 08.30 - 09.00 Transfer to Kanaaldijk 29, 5683 CR Best
- 09.00 – 09.30 Introduction Brabant life sciences cluster and Partners in International
Business Program [Medizintechnik Holland](#): high-tech supplier's network
in the Brainport Eindhoven region cooperating on entering new
international markets.
- 09.30 – 10.45 Company visit to [Demcon](#), high-end technology supplier of products
and systems, with as focus areas high-tech, medical, embedded,
optomechatronic, unmanned and industrial systems & visions. Demcon
develops and realizes medical devices for diagnosis, therapy, care and
self-care.



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- 10.45 – 11.00 Transfer to Veenpluis 4-6, 5684 PC Best
- 11.00 - 12.30 Company visit to [Philips HealthCare](#) (to be confirmed)
- Philips HealthCare in Best: €17 billion multinational providing innovative solutions for healthy living and prevention to diagnosis, treatment and home care.
- 12.30 - 13.00 Transfer to Brainport Industries Campus. Address: Ba, A2, Eindhoven
- 13.00 – 13.30 [Brainport Industries Campus](#)
Cradle of open innovation: the first location where high-tech suppliers innovate and produce together. The most successful companies will share state-of-the-art resources here, such as cleanrooms, flexible manufacturing areas, warehouses and advanced facilities. BIC will become the leading hub where innovation and competitiveness in high-tech manufacturing reach the highest level of excellence.
- 13.30 – 15.00 *B2B Meet & Match networking lunch at Brainport Industries Campus*
Matchmaking event for the business delegation with Dutch companies, knowledge institutes and cluster representatives from the Dutch medical cluster.
- The *Brabant medical cluster* adds up to 350 medtech companies with 5000 fte's, responsible for 1300 patents per year: multinationals, SME's and startups.
- Focus areas:* robotics (AI, image guided navigation and autonomous robots for care and surgery), smart diagnosis (remote sensing and diagnostics, homecare infrastructure, medical imaging), smart interventions (molecular, cell and tissue engineering, image- guided minimal and non- invasive interventions, plasma medicine, virtual physiological human VPH) and datascience in health (big data analytics and visualization).
- Research and knowledge institutes* are TU/e Technical University Eindhoven, Holst Centre (IMEC/TNO), Eindhoven MedTech Innovation Centre.
- Companies* a.o. Philips Healthcare and Research, GE Healthcare, NTS Group, Sioux, Medtronic, B.Braun, Malvern Panalytical, Össur, Illumina, Demcon, KMWE, LifeTec Group, Medical Robotics, MI- Partners,



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ThermoFischer Scientific, Teledyne Dalsa, VDL Healthare Technologies, W.L. Gore, Xeltis.

15.00 – 15.30 Transfer to TU/e Campus 5612 AZ Eindhoven.

15.30 - 17.30 [TU/e Eindhoven University of Technology](#) (to be confirmed)
Maarten Steinbuch, Distinguished University Professor in Systems and Control and Chair of Control Systems Technology at TU/e, is primarily known for his work in the field of advanced motion control, as well as in robotics for high precision surgery. His research resulted in improvement of robots for precision domestic care and surgery.

Maarten Steinbuch is co- founder of Preceyes and MicroSure and CEO of Medical Robotics Technologies.

Presentation and Q&A about high-precision surgery robots for eye surgery, autonomous image guided bone robots, developments on world-modelling and smart algorithms to enable robotics for use in homes, hospitals and senior homes.

Guided tour research facilities and Preceyes micro surgery (conditionally)

17.30 End of program, transfer to The Hague

LIFE SCIENCES TRACK SOUTH-HOLLAND

20 February

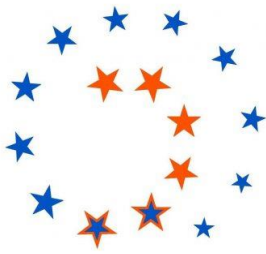


8:15 - Transfer from hotel to [Rotterdam Science Tower](#)

9:00 - Meet-up with cluster representatives at the [Erasmus Center for Entrepreneurship](#) (ECE) Campus in **Rotterdam Science Tower**

The Rotterdam Science Tower is situated at the heart of the Rotterdam Innovation District and the Merwe-Vierhavens (M4H) area.

As a hotbed for entrepreneurship and innovation, the ECE Campus spans over 9,000m² and five of the tower's floors. It is home to over 75 innovative companies in sectors ranging from fintech to port & logistics to healthcare.



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9:20 - **Plenary kick-off for all groups**

Presentations by:

- Introduction to the [South-Holland Life Sciences & Health](#) Cluster by [InnovationQuarter](#)
- **Presentation and discussion about Medical Devices and innovations in Minimal Invasive Instruments** in The Netherlands and within the South-Holland Life Sciences Cluster: Medical Delta <http://www.medicaldelta.nl/about>

By prof. Dr. Ir. Ton van der Steen

Ton van der Steen is Head of Biomedical engineering at Erasmus MC. He has a Master in Applied Physics from TU Delft (1989) and a PhD in Medical Sciences from Nijmegen University (1994). In 2002, he was appointed Professor of Biomedical Engineering in Cardiology at Erasmus University. He is Fellow of IEEE and of the European Society of Cardiology, and member of the Netherlands Academy of Engineering (AcTI) and the Netherlands Academy of Sciences (KNAW). Van der Steen is professor at TU Delft, faculty of Applied Sciences and honorary visiting professor at the Chinese Academy of Sciences in Shenzhen.

10:00 – **lab tours and meet-up with companies**

11:00 – **wrap-up and continuing in 3 groups.**

Group 1: Government- and cluster representatives will be provided a program by the Province of South-Holland (Rotterdam / The Hague)

Group 2: Medical Technology, Robotics, and minimally invasive techniques (Delft)

Group 3: Life Sciences, Biotech and Diagnostics (Leiden)

Program Group 1: offered separately by Province of South Holland

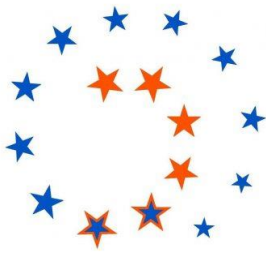
The Province of South Holland will organize a series of round table discussions to facilitate knowledge exchange on topics to be decided upon: cluster policy, international collaboration (For example in Vanguard), etc.

Program* Group 2: Medical Technology, Robotics, and minimally invasive techniques

12:00 – Arrival at Robohouse @ [Delft University of Technology](#) Address: Robovalley, Julianalaan 67A, 2628 BC **Delft**

12:15 – Lunch meeting, presentations and round table with representatives from [Robovalley](#) and [Delft Robotics Institute](#):

- Prof. Dr. ir. M. (Martijn) Wisse, Scientific Director at Delft Robotics Institute
- Ir. A.A. (Arthur) de Crook, Associate director Valorisation
- Jaimy Siebel, General Manager Robohouse
- Herbert ten Have, director of [Fizyr](#) (deeplearning tools for robotics)



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14:00 – Transfer to TU Delft, department of Biomechanical Engineering

14:20 – Meetup, presentations and demonstrations at TU Delft research facilities on Minimally Invasive Surgery and Interventional Techniques.

By Dr. Gabrielle Tuijthof and Dr. Tim Horeman.

16:00 - Transfer to [YES! Delft incubator](#)

Presentations by YES! Delft, city of Delft and/or TU Delft, Tour of incubator & matched Meetup with MedTech companies.

- [Blue Bee](#) (Automate routine next-generation (NGS) data analysis)
- [BI/OND](#) (Customized Organs-on-a-chip)
- [Intespring](#) (Exoskeletons)
- [Surge-On Medical](#) (steerable, detachable and cleanable minimally invasive instruments for arthroscopy and laparoscopy)

17:30 – End of program and transfer to Schiphol Airport

Program* Group 3: Life Sciences, Biotech and Diagnostics

12:15 – Arrival in [Leiden Bio Science Park](#). Address: [BioPartner Center](#), J.H. Oortweg 19, 2333 CH Leiden

12:30 - **Lunch meeting**, presentations and round table with representatives from Leiden Bio Science Park Foundation, LURIS (Tech transfer office of Leiden University Medical Center).

- Harry Flore, Chairman of Leiden Bio Science Park Foundation and CEO of [HAL Allergy](#)
- Mr.drs. [Ivo de Nooijer](#), director of LURIS

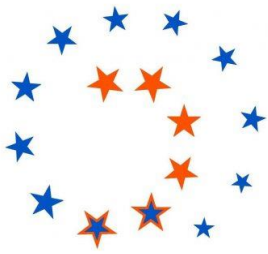
14:00 – short tour in BioPartner and matched meetup with diagnostic companies:

- [Mimetas](#) (Organs-on-a-Chip)
- [Ocello](#) (3D screening technologies)
- [SysBiosim](#) (Insilico Modeling)

15:15 – short walking tour over the park, transfer to [NeCEN](#) (Netherlands Centrum for Electron Nanoscopy)

16:15 – meet-up with representatives, discussion and tour in NeCEN

Prospected host: Prof.Dr. Hans Tanke, LUMC (Leiden University Medical Center) - Molecular Cell Biology & Leiden University - NeCEN & TU Delft - Bionanoscience



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Hans Tanke was awarded his PhD in Leiden in 1982 on the subject of cytochemical analysis methods for DNA and RNA. He was appointed professor of cellular biology in 1993 and has been head of the Molecular Cellular Biology Department at the Leiden University Medical Center (LUMC) since 1997. Since 2013 he has also been working in the Faculty of Applied Sciences at TU Delft.

17:30 – End of program and transfer to Schiphol Airport

* However all program elements have been carefully selected, they are – thus far – all ‘to be confirmed’. Depending on the profiles of companies that are part of the international delegation from the four motors collaboration, parts of the program may be adjusted



Rotterdam

Source: Rotterdam Partners



Hightech Campus Eindhoven