

## **Microscopic Practice and Visual Culture in the 17<sup>th</sup> and 18<sup>th</sup> centuries**

**Where: Artis Library, Plantage Middenlaan 45, Amsterdam**

**When: Wednesday 2 November**

Museum Boerhaave in Leiden and Artis Library of the University of Amsterdam organize a one-day expert meeting which addresses the practice of microscopy in the Netherlands. The period under investigation roughly covers the era between the pioneering discoveries in the second half of the seventeenth century which established the microscope's place in observation, and the professionalization of microscopic research associated with nineteenth century discipline formation.

The expert meeting intends to look further into this period in which the growing popularization of science went hand in hand with instrumental commercialization. This being the era in which art and science still were complementary, the meeting will emphasize the close cooperation between scientists and artists in observing and representing nature.

The meeting, though informal, aims for an active participation of all attendees. It will be held in the inspiring atmosphere of Artis Library. Talks in the morning will discuss science and early modern Dutch society; making, trading, and using microscopes; and the drawing of specimens. In the afternoon there will be hands-on sessions with historic microscopes from the collection of Museum Boerhaave and the drawings, watercolors and printed books, kept in Artis Library, which will allow us to appreciate microscopic practice from a material perspective.

After the tea break we will visit ARTIS Micropia, the only museum of micro-organisms in the world, in order to learn how and why the microscopic practice of the 17<sup>th</sup> and 18<sup>th</sup> centuries are presented to the larger modern day public.

The expert meeting, co-organized by Artis Library and Museum Boerhaave, in co-operation with ARTIS Micropia, is part of a NWO Humanities-funded research project on optical culture in the early modern Netherlands and is supported by the larger research program 'Art and Science in the Early Modern Low Countries (ca 1560-1730)' by HuygensING and the Rijksmuseum.



ARTIS MICROPIA



## **Programme**

9.00 – 9.30	Registration and coffee
9.30 – 9.40	Welcome and introduction (Steph Scholten)
9.40 – 10.20	Science and early modern Dutch society (Eric Jorink)
10.20 – 11.00	Building of and trading in microscopes (Huib Zuidervaart)
11.00 – 11.20	Coffee break
11.20 – 12.00	Using the Van Leeuwenhoek microscope (Lesley Robertson)
12.00 – 12.40	Imaging nature (Eric Klarenbeek)
12.40 – 14.00	Lunch break
14.00 – 14.45	Workshops (1) - Observing through historic microscopes (Tiemen Cocquyt) - Pierre Lyonet and Johannes Schepens (Hans Mulder)
14.45 – 15.30	Workshops (2) - Observing through historic microscopes (Tiemen Cocquyt) - Pierre Lyonet and Johannes Schepens (Hans Mulder)
15.30 – 16.00	Tea break (and walk to Micropia)
16.00 – 16.45	New ways of showing the invisible (Micropia, Jasper Buikx)
16.45 – 17.00	Walk to Artis Library
17.00 - 17.30	Wrap up (Sven Dupré)
17.30 – 19.00	Drinks

**NB:** The morning sessions will be chaired by Peter Willemsen.

## Biographies speakers

**Jasper Buikx** is microbiologist and scientific curator of ARTIS-Micropia in Amsterdam. Since the opening of Micropia he is responsible for the scientific content and education. He studied biology at Leiden University and focusses on bridging the gap between science and society.

**Tiemen Cocquyt** is curator at Museum Boerhaave in Leiden. He is in charge of the natural science collections from the seventeenth and eighteenth centuries. His research interests include optical instrumentation and cabinets of experimental philosophy. Currently he is in the final stages of an NWO-funded research project aiming at a better understanding of lens grinding practice and optical culture in the seventeenth-century Netherlands.

**Sven Dupré** is Professor and Chair of History of Art, Science and Technology at Utrecht University, and Professor of History of Art, Science and Technology at the University of Amsterdam. He is the Scientific Director of the project *Technique in the Arts: Concepts, Practices, Expertise, 1500-1950*. Dupré is a member of the Descartes Centre for the History and Philosophy of the Sciences and the Humanities at Utrecht University, co-directing (with Wijnand Mijnhardt) the project *Creating a Knowledge Society in a Globalizing World, 1450-1800* in cooperation with the Max Planck Institute for the History of Science and the Netherlands Institute for Advanced Study (NIAS).

**Eric Jorink** is Teylers professor at Leiden University and researcher at the Huygens Institute for the History of the Netherlands (KNAW) in The Hague. He is interested in the relation between science, religion and art in the early modern period. His publications include *Reading the Book of Nature in the Dutch Golden Age 1575-1715* (Leiden 2010) and (together with Ad Maas, eds), *Newton and the Netherlands. How Isaac Newton was fashioned in the Dutch Republic* (Leiden 2012). In the academic year 2012-2013 he was Andrew W. Mellon visiting professor at the Courtauld Institute of Art where he taught, together with Joanna Woodall, the MA-course 'Visualizing Knowledge in the Early Modern Low Countries'.

**Eric Klarenbeek** graduated in 2003 at the Design Academy Eindhoven. Since then he has designed for clients such as Droog Design, Marcel Wanders's Moooi, Lidewij Edelkoort, Makkink Bey, Eneco and the Ministry of the Netherlands. He is founder of the ArTechLab at the AKI ArtEZ art academy. His projects have been exhibited and published extensively. His windlight is presented at the World Expo 2010 in Shanghai and The Floating Light Project was awarded for innovative design at The Design Academy Eindhoven.

**Hans Mulder** is curator of Artis Library of the University of Amsterdam. He studied history at Utrecht University. He co-hosted the 2014 symposium on life and work of Maria Sibylla Merian and currently participates in the newly founded UvA research group Natura Artis Magistra. He teaches on the History of Natural History and the History of the Printed Book. Mulder chaired the Dutch Book Historical Society.

**Lesley Robertson** worked until 2015 at Delft University of Technology on biological sulphur and nitrogen removal from wastewater and as Biological Safety Officer. She curates the Delft School of Microbiology Archives and researches the use of (facsimile) van Leeuwenhoek microscopes.

**Peter Willemsen** is molecular microbiologist at Wageningen Bioveterinary Research in Lelystad. This institute provides research and advisory services to develop effective prevention and control of animal and zoonotic diseases. Having worked the first years in the realm of reference tasks for mycobacterial infections and brucellosis he became more involved with managing many and diverse projects such as vaccine development for African Swine Fever, Phage therapy for the Control of *Campylobacter* in poultry, EHEC and food safety. As a member of the “Microbenclub”, a society for the promotion of knowledge about microbiology, he was involved in publication of the “Microcanon” and “Van Leeuwenhoek: Groots in het Kleine”.

**Huib J. Zuidervaart** is a Senior Historian of Science employed by the Huygens Institute for the History of the Netherlands of the Royal Netherlands Academy of Arts and Sciences (KNAW). He studied Physics, Astronomy and History of Science at the VU University in Amsterdam and obtained a Ph.D. at Utrecht University on a dissertation on the history of astronomy in the 18th-century Dutch Republic. His main field of research is the history of science and scholarship in early modern Europe, with a focus on the history of scientific instruments and collections. He is the Editor-in-chief of the journal *Studium. Tijdschrift voor Wetenschaps- en Universiteitsgeschiedenis*.



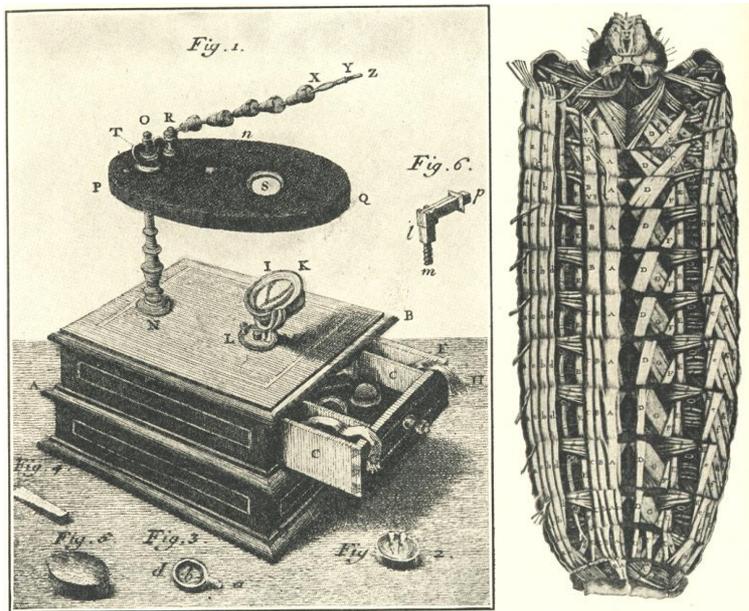
VAN A. LEEUWENHOEK. 3

een tandtoeker te reinigen, alsmede detselvigc wel met een dieck flink te vryven, waer door myn kieften en tanden so fuyver en wit blyven, als weynig menichen van myn jaren gebeurt, en myn tanvlees (met wat hard foudk daar regen kome te vryven) niet en komt te bloeden. Nogans fo en ifyn myn tanden daar door fo fuyver niet, of (wann'er ik detselc met een vergrootfpiegel beflag) daar blyft of groeyt tuffchen eenige vande kieften en tanden een weynig witte materie, die fo dik is, als of het beflagen meel was. Dit felvige obfervende, oordeelde ik (hoewel ik gene beweginge daar inne konde bekenen) dat'er eger levende dierkens in waren. Ik heb dan het felvige vercheyde malen met fuyver regen-water daar geen dierkens in waren, en ook met fpeckfel vermengt, dat ik uyt myn mond nam, ra dat ik het felvige vande lugt beflagens hadde gecheyde (om dat de lugt beflagens geen beweginge in 't fpeckfel founden maken) en meest doorgaans met groote verwondering gefien, dat inde gefeyde materie waren, veele feer kleyne dierkens, die haar feer zardig bewegingen. De grootte feer, was vande Fig. A. detselc hadden een

Fig. A. — b  
 Fig. B. — c  
 Fig. C. — d  
 Fig. D. — e

\* a 2 feer

Antoni van Leeuwenhoek (1632-1723)



Pieter Lyonet (1706-1789)



Johannes Schepens (1841 - 1810)