CALL FOR ABSTRACTS and PROGRAMME OUTLINE

Center for Technology
Aachen Europaplatz
www.artificial-vision.org

CALL FOR ABSTRACTS
Deadline:
August 16th, 2013
Based on several interdisciplinary research programs launched worldwide some 20 years ago, devices have been designed, constructed, assembled, tested, re-designed, re-tested, and now fabricated and approved for human application to bring back vision in blind people. The first patients are already crossing streets using a visual prosthesis. It is the goal of this international symposium, to bring together scientists and researchers working in this field presenting their research results and discussing ideas and thoughts to advance concepts and devices. Although the scientific community is excited about what has been achieved so far, there must be a discussion about measures to further improve the outcomes of current available technology and the future of visual prosthetics facing technology advances on one hand and biology driven approaches such as stem cells or gene therapy on the other hand. This symposium is actually meant as a workshop rather than a congress. Discussions should be a major part of it.

The Artificial Vision 2013 meeting is the third meeting of its kind in Germany. The first two meetings took place in 2006 and 2009 in Bonn, the city of the Retina Implant Foundation. The meeting now moves to Aachen, one of the German cores where Life Sciences successfully meet Technology and Engineering. RWTH Aachen University is one of the leading Universities of Technology in Europe and Medicine and Technology is one of its major profile areas.

My colleagues Wilfried Mokwa from RWTH University Aachen, Frank Müller and Andreas Offenhäusser from the Research Center Jülich, and I, we cordially invite you to come to Aachen and join us in discussing present aspects and thinking about the future of visual prosthetics.

Peter Walter
Department of Ophthalmology,
University Hospital Aachen
RWTH Aachen University, Medical Faculty
and Technology is one of its major profiles, where Life Sciences successfully meet Technology and Engineering. The first two meetings took place in 2006 and 2009 in Bonn, the city of the Retina. Based on several interdisciplinary research programs launched worldwide some advances on one hand and biology driven approaches such as stem cells or gene therapy. Although the scientific community is excited about what has been achieved so far, there must be a discussion about measures to further improve the outcomes of research.

The Artificial Vision 2013 meeting is the third meeting of its kind in Germany. The current available technology and the future of visual prosthetics facing technology designed, re-tested, and now fabricated and approved for human application to the benefit of patients. Together scientists and researchers working in this field presenting their research.

Venue: Center for Technology Europaplatz
Dennewartstr. 25-27, 52068 Aachen, Germany

Website: www.artificial-vision.org

Scientific programme and further information

Prof. Dr. Peter Walter
Department of Ophthalmology, University Hospital Aachen
RWTH Aachen University, Medical Faculty
Pauwelsstraße 30, 52074 Aachen, Germany
Phone: +49 241 / 808-8191, Fax: +49 241 / 808-2047
E-Mail: pwalter@ukaachen.de

Organization: Congress Organisation Gerling GmbH
Werftstraße 23, 40549 Düsseldorf, Germany
Phone: +49 211 / 592244, Fax: +49 211 / 593560
E-Mail: info@congresse.de, Internet: www.congresse.de

Official Language: English

Hotel Booking: See hotel list on the registration form (printed or online: www.artificial-vision.org)

Social Event: Conference Dinner
Friday, November 8th 2013, 20:00h
Hotel Kasteel Bloemendaal
Bloemendalstraat 150, 6291 CM Vaals
The Netherlands
(Bus transfer from the congress venue)

ATTESTANCE FEE

<table>
<thead>
<tr>
<th>Registration</th>
<th>Until August 31\textsuperscript{c}</th>
<th>After August 31\textsuperscript{c}</th>
<th>On site</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Symposium attendance fee</td>
<td>EUR 180,–</td>
<td>EUR 200,–</td>
<td>EUR 220,–</td>
</tr>
<tr>
<td>Reduced rate for PhD students and residents*</td>
<td>EUR 100,–</td>
<td>EUR 120,–</td>
<td>EUR 140,–</td>
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\* Trainees must supply a letter of verification as proof of training. The letter has to be sent to the congress organization prior to the meeting.

The attendance fee covers the costs for coffee breaks, lunch, and the conference dinner.
Incl. VAT and excl. foreign transfer fees

Payment: by bank transfer (bank details are quoted on your confirmation and invoice. Please do not transfer money without noting your invoice number) or by credit card: VISA, AMERICAN EXPRESS, MASTERCARD
**Important notes for participants**

The attendance fee covers the costs for coffee breaks, lunch, and the conference dinner. If you register late or on site we cannot guarantee for lunch and participation at the social program.

You are encouraged to apply for the meeting either online, by mail or by fax. Cancellation for the symposium has to be made via mail or via fax (+49 211 / 59 35 60) by November 2nd, 2013. In any case an administration fee of EUR 20,- has to be paid. After this dates, no refunds can be made.

**CME POINTS**

The Symposium is registered at the Ärztekammer Nordrhein providing CME points for the German Continuing Medical Education System. Please bring your Bar Code Labels and we will register you for CME point documentation.

An equivalent Certificate of Attendance will be given to you upon on-site registration.

**CALL FOR ABSTRACTS**

**Abstract submission**

Please submit your abstract online:

www.artificial-vision.org

Deadline for Abstract submission: August 16th, 2013

**Layout**

Your abstract must not exceed 2000 letters in total (including blanks) and, it must be written in Times New Roman 10 point with single line spacing. Start with the title, authors, and affiliation(s) followed by a blank line followed by a standard abstract structure (Objective, Materials & Methods, Results, Discussion). In case of external or institutional funding please acknowledge the sponsor.

**Example**

The thresholds for retinal stimulation in blind RP subjects.

Franz Reuter, Julia Sachtweh, Reinhard Meier

Department of Ophthalmology, Island City, Elsewhere

**Objective.** To describe the stimulation thresholds for subretinal stimulation using platinum red electrodes embedded into new insulation materials.

**Materials and Methods.** In six blind RP patients a new sub-retinal device was implanted and cortical potentials were recorded upon electrical retinal stimulation. Cortical potentials were determined using a new response isolation algorithm developed by Meier et al. The cortical responses were correlated with stimulus parameters.

**Results.** In all six patients the implantation was done successfully. All patients had visual percepts. In all patients cortical potentials can be recorded and the the stimulus duration necessary to obtain a response was 67 ms cathodic first with an mean amplitude of 435 µV.

**Discussion.** The stimulation at threshold was well within the non-toxic range for tissue stimulation and no patient had any adverse events.

**Acknowledgment.** This work was supported by ABC grant 874987.
Friday, November, 8th, 2013

15:00 h  The Meeting starts. Opening Remarks.
Notes will be given by representatives of the German Federal Research Ministry, the German National Research Council DFG, the Province of Northrhine-Westfalia, the City of Aachen, and RWTH Aachen University.

Session I
Degeneration within the Visual System – from genes to loss of function
This session should summarize available information on anatomical and functional changes associated with retinal dystrophies or degenerations in animal models and in humans at various levels of the visual system –, in the retina but also in the visual cortex and the retinocortical pathways.

20:00 h  Conference Dinner

Saturday, November, 9th, 2013

09:30 h  The Meeting continues.

Session III
Preclinical Tests – from concepts to experimental implantation
In this session presenters are asked to report on biocompatibility tests, in-vitro or in-vivo experiments using non-approved devices or modules.

12:00 h  Lunch Break

Session IV
Clinical Tests – from Concepts to Products
In this session we want to learn about clinical trials with premarket products or products already approved. What is the outcome after implantation of visual prostheses and what can we learn from this?

Session V
New Ideas – from products back to thoughts – thinking the future
What will be the future of visual prostheses? How can we improve the outcome with current technology and what is waiting behind the door?

16:00 h  The Meeting ends. Closure Remarks. Farewell.
International Airports / High Speed Train System (more or less)

From Frankfurt. Take the ICE High Speed train from Frankfurt Airport Station to Cologne Main Station (approx. 1 h) and continue to Aachen Main Station (approx. 45 – 60 min).

From Düsseldorf. Take the train from Düsseldorf Airport Station to Aachen Main Station (approx. 1.5 h).

From Cologne. Take the train from Cologne Airport Station to Cologne Main Station (approx. 15 min) and then continue to Aachen Main Station (approx. 45 – 60 min).

From Aachen Main Station take a taxi to Technologiezentrum at Europaplatz.

By car

From Frankfurt Airport you can drive highway A3 to Cologne and then change to A4 direction to Aachen. At AK Aachen please change to A544 direction Aachen Europaplatz (approx. 3 h).

From Düsseldorf Airport. A52 → A61 → A44. Then A544 direction Europaplatz (approx. 95 km, 1.5 1/2 h).

From Cologne Airport. Take the A59, then change to A599 followed by A4 towards Aachen. Then A544 direction Europaplatz (approx. 82 km, 1.2 h).

Meeting address

Technologiezentrum Europaplatz. Dennewartstr. 25-27. 52068 Aachen, Germany.
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My colleagues Wilfried Mokwa from RWTH Aachen University, Medical Faculty

Peter Walter RWTH Aachen University, Medical Faculty University Hospital Aachen

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advances on one hand and biology driven approaches such as stem cells or gene

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Please tick:

☐ I am interested in this meeting. Please send me the final program
of

☐ I register definitely for Artificial Vision 2013

Social event:

☐ Conference Dinner (Friday, November 8th, 2013) _______ person/s

I am a (please tick):

☐ Regular ☐ PhD student*, resident* (*presentation of appropriate proof of status required)

Payment (please tick required method):

☐ Bank transfer
Credit card: ☐ MasterCard ☐ VISA ☐ American Express

Card No.: ___________________________ Valid: _____________________

Hotel reservation:

Arrival date ___________________________ Departure date ___________________________

Mercure Hotel Aachen Europaplatz***S

www.mercure.com

(next to the Center for Technology)

SR: € 84.00 | DR: € 94.00
incl. breakfast

Cancellation deadline: 10th September, 2013

Special request:

Service and VAT (value added tax) are included in the room rate. The rooms will be confirmed by Congress-

Organisation Gerling GmbH, Düsseldorf, in order of their receipt. To guarantee your requested hotel, reservations

should be made as soon as possible.

Please do not reserve your hotel by phone. For cancellation and/or rebooking after confirmation an administra-
tion charge of € 20.00 will be made. In case of cancellation of the hotel reservation or if the participation is

partly or fully cancelled after the indicated deadline Congress-Organsiation Gerling GmbH reserves the right to
charge up to 100% of the agreed accommodation price.

Objective.

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Discussion.

(Tuesday, November 5th, 2013) ____________________

Chemical stimulation using platinum red electrodes embedded into new

Objectives, Materials & Methods, Results, Discussion). In case of

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Changes, errors and misprints excepted.
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THE INTERNATIONAL SYMPOSIUM ON VISUAL PROSTHETICS
November, 8th – 9th, 2013     Aachen, Germany

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YOUR WAY TO AACHEN
For German participants:

RETINA IMPLANT AG
Gerhard-Kindler-Str. 8
72770 Reutlingen
Germany
Phone: +49 71 21 36 4030
www.retina-implant.de

Looking and you will see
Even at the first sight:
Small and now
Ready to realize
A great vision –
Retina Implant
Join the lecture of Prof. Eberhart Zrenner, M. D. at Artificial Vision 2013