Improving access to medical knowledge
The Cardionetworks Foundation is a non-profit organization founded in 2007 and based in The Netherlands. The goals of the foundation are: “to improve medical knowledge, especially in the field of cardiology, and to provide access to this knowledge by facilitating publications in digital or other form, amongst other means by building and maintaining websites.” As a not-for-profit organization, all revenues are spent in the pursuit of this cause.

Cardionetworks manages specialized websites, providing high quality and up-to-date information freely to physicians all around the world. Our websites are all published under a creative commons license and the information is accessible without login or registration. We subscribe to the HONcode principles of the Health On the Net Foundation.

Make a donation

As a charitable enterprise, we rely entirely on the generosity of our supporters to allow us to continue in our work. To join our growing list of supporters please contact vanderwerf@cardionetworks.org to discuss the best way to contribute.

Every cent you are able to give helps us further promote free global access to vital medical information and resources.

Thank you for your generosity.
MESSAGE FROM THE FOUNDATION BOARD

Welcome to the 2014 annual report of Cardionetworks. Since its inception in 2007, the goal of the Cardionetworks Foundation has been to provide free and open access to unbiased and up-to-date medical knowledge to the global medical community. The non-profit organization enjoys a significant international online presence from its base in The Netherlands.

The foundation publishes and maintains a series of websites offering physicians invaluable, reliable and up-to-date information on certain specialized subjects. Our websites are published under a creative commons license, allowing free, global access without login or registration.

We are delighted to report that the number of visitors to Cardionetworks websites continues to increase. This year we passed the 2 million visits. Over 2.1 million visits to our websites were logged in 2014, and the average time each visitor spent on the website was more than 2.5 minutes. Our global reach now extends to 225 countries, and we are particularly proud that increasing numbers of our visitors are located in developing countries. India for example has now entered the 4th place in our visitor statistics.

Fundraising is challenging in this tough economic era, and similarly to 2013, in 2014 we were again unable to raise enough funds to create a buffer for the medium-term future of Cardionetworks. Funds were used to expand and increase the quality of the website content, to move all websites to new dedicated servers, adoption of the Cloudflare software to ensure faster and more reliable access from all over the world and to print updated ECGpedia, ECHOpedia and PCIpedia reference cards that are sold online. In 2014 we also launched the new website SYNCOpedia.org and we hope this website too will turn into another valuable knowledge base.

The foundation board has also seen changes this year; Martijn Meuwissen (treasurer) and Ivo van der Bilt (secretary) have handed their positions over to Christian van der Werf (treasurer) and Pieter Postema (secretary).

None of the achievements of this year, or during the lifetime of Cardionetworks, would have been possible without the tremendous efforts of the many volunteers who have helped in the process. As always, the foundation board is grateful for all the work and time that have been freely given to make this project such a success.

Jonas de Jong, MD, PhD, Chair
Pieter Postema, MD, PhD, Secretary
Christian van der Werf, MD, PhD, Treasurer
The Cardionetworks foundation board.
The general trend is towards continued increase in visitor numbers to both the English and Dutch versions of ECGpedia (en.ECGpedia.org and nl.ECGpedia.org). The English version of ECGpedia is still our most frequently visited website, and again attracted more visits compared to last year (1.48 million compared to 1.46 million).

The majority of visitors located the site through a search engine. A variety of search terms were used to locate the site, including “myocardial infarction”, “pathologic q waves”, “QTc calculator”, and “QRS axis”, demonstrating the genuine need for this service.

A total of 70% of visitors were new to en.ecgpedia.org during 2014.

**VISITORS STATISTICS**

The visitor statistics of en.ECGpedia.org in 2014

<table>
<thead>
<tr>
<th>Country/Territory</th>
<th>Acquisition</th>
<th>Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sessions</td>
<td>% New sessions</td>
</tr>
<tr>
<td>United States</td>
<td>1,488,510</td>
<td>70.30%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>463,350</td>
<td>80.96%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>341,583</td>
<td>53.05%</td>
</tr>
<tr>
<td>India</td>
<td>105,963</td>
<td>74.49%</td>
</tr>
<tr>
<td>Belgium</td>
<td>70,025</td>
<td>73.91%</td>
</tr>
<tr>
<td>Australia</td>
<td>63,030</td>
<td>60.25%</td>
</tr>
<tr>
<td>Canada</td>
<td>49,419</td>
<td>74.73%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>45,714</td>
<td>77.43%</td>
</tr>
<tr>
<td>Germany</td>
<td>19,441</td>
<td>71.62%</td>
</tr>
<tr>
<td>Philippines</td>
<td>13,632</td>
<td>83.38%</td>
</tr>
</tbody>
</table>
The geographical distribution of visitors to en.ecgpedia.org is shown in the map. The majority of users continue to be based in English-speaking countries. However, visitors from countries such as India, the Philippines and Malaysia represent a significant proportion of our users.

The majority of visitors located the site through a search engine, demonstrating the genuine need for this service.
CARDIONETWORKS: A TIMELINE OF ACHIEVEMENT

Highlights of 2014

Over 2.1 million visits from 225 countries were logged, with an average visit lasting more than 2.50 minutes.

In collaboration with the Health[e]Foundation the major chapters of the Textbook of Cardiology were completed.

Server upgraded once more to meet continuing and increasing demands and introduction of CloudFlare to be able to regulate the continuing increase in visitors from all over the world.
Cardionetworks’ first project was ECGpedia.org, an online electrocardiography course. We have since created, and continue to maintain, around 30 individual websites, all dedicated to improving medical knowledge in the field of cardiology. We subscribe to the HONcode principles of the Health On the Net Foundation.

Anyone can contribute to the Cardionetworks websites through Mediawiki software. We welcome all improvements to our websites. All suggestions for improvement are screened by physician moderators.

ECGpedia

ECGpedia is a free electrocardiography (ECG) course and textbook designed for medical professionals such as cardiac care nurses and physicians. It is the primary website of the CardioNetworks Foundation. Since its foundation ECGpedia has become an important source of up-to-date information on ECG interpretation. The website now includes more than 2500 example ECG’s provided by contributors around the world. Current efforts are directed towards improvement of the readability of the websites, more interactivity with visitors (quizzes and polls). A comprehensive online ECG basics course with exam is now available (moodle.ecgpedia.org). In addition, an iBook version of the website has been developed.

Textbook of Cardiology

The Textbook of Cardiology is an up-to-date and freely accessible online cardiovascular reference work. This is a project in collaboration with the Health[e]Foundation. The Health[e]Foundation has much experience with HIV education for medical professionals in developing countries. Requests came forward from participant for cardiovascular education. In collaboration the textbook has now been written. It will be made available online by Cardionetworks and offline by the Health[e]Foundation which will include the text on USB sticks that are distributed through their network.
 Contributors to the online Textbook of Cardiology

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• Fransje van der Waals, MD, PhD, The Netherlands

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• Heather Melrose, Manchester, UK
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• Louise Olde Nordkamp, MD, AMC, The Netherlands
• Annelieke van Riel, MD, AMC, The Netherlands
• Josien Rozenburg, Msc, The Netherlands
• Hayang Yang, AMC, The Netherlands
• Esther Wijgerinck, AMC, The Netherlands
• Arthur Wilde, MD, PhD, AMC, The Netherlands
• Janneke Wittekoek, MD, PhD, The Netherlands
• Pier Woudstra, MD, AMC, The Netherlands
Echopedia

Echopedia is a free echocardiography textbook, designed for medical professionals such as cardiologists and echocardiography technicians. The site is still under development. Echopedia now contains more than 900 echocardiogram images from more than 170 cases provided by the AMC Echolab. An overview of all echocardiographic normal values is now presented on the website. In 2013 we received an excellent contribution of basic text chapters that were missing and are currently being converted to the website format.

PCIpedia

PCIpedia is a free textbook on intervention cardiology, designed for medical professionals such as cardiologists and cathlab technicians. The site is still under development. The first batch of coronary angiography cases is now online. Also, a start has been made to introduce visitors to angiographic coronary anatomy and technique. A pocket reference card has been developed and printed to give a quick review of coronary angiographic views.

BrugadaDrugs.org

The Brugada syndrome has been recognized as an important cause of sudden cardiac death in individuals at a relatively young age. Many drugs have been associated with adverse events in Brugada-syndrome patients. These drugs may either induce life-threatening ventricular arrhythmias and/or induce the characteristic Brugada syndrome-linked ECG abnormalities which are associated with poor outcome.

BrugadaDrugs.org provides an overview on the available evidence and expert opinion regarding drug safety in Brugada syndrome. And is the result of a recently performed review of the literature, BrugadaDrugs.org ensures worldwide and up-to-date availability of this knowledge base to physicians and patients. This site was launched by Pieter Postema and is hosted by Cardionetworks.
Offline content

While the majority of our effort at Cardionetworks is focused towards delivering high-quality, freely-available medical information over the Internet, we also offer certain information and training offline.

ECGpedia pocket cards are available and have been proved very popular. They can be printed out online, and ordered in a full colour and laminated print. More than 12000 preprinted cards have been distributed.

Live ECGpedia courses have proved very popular amongst the following groups:

- Dutch medical students
- Anesthetist residents
- General practitioners
- Junior doctors
- Anesthesia and internal medicine residents

A PCIpedia pocket card has been published

An Echopedia pocket card has been published

Visitor statistics 2014:

- en.ecgpedia.org
  1,488,510
- nl.ecgpedia.org
  320,908
- echopedia.org
  209,581
- brugadadrugs.org
  54,094
- textbookofcardiology.org
  26,712
- thrombopedia.org
  12,141
- pcipedia.org
  8,103
- cardionetworks.org
  4,987
- syncopedia.org
  1,372
FOUNDATION BOARD

Jonas S.S.G. de Jong, MD, PhD, FESC
Chair
Cardiologist, Electrophysiologist
Onze Lieve Vrouwe Gasthuis
The Netherlands.

Pieter G. Postema, MD, PhD
Secretary
Cardiology resident
Academic Medical Centre, University of Amsterdam
The Netherlands.

Christian van der Werf, MD, PhD
Treasurer
Cardiology resident
Academic Medical Centre, University of Amsterdam
The Netherlands.

Ivo A.C. van der Bilt, MD
Board member
Cardiologist
Haga Ziekenhuis
The Netherlands.
BENEFACTORS OF THE FOUNDATION IN 2014

PREVIOUS YEARS SPONSORS
## Accounts 01.01.2014

<table>
<thead>
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<th>Revenues</th>
<th>Expenses</th>
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<tbody>
<tr>
<td>Benefactors</td>
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</tr>
<tr>
<td>Reference card &amp; book revenues</td>
<td>Webhosting costs</td>
</tr>
<tr>
<td></td>
<td>Content development &amp; office</td>
</tr>
<tr>
<td></td>
<td>Reference cards</td>
</tr>
<tr>
<td></td>
<td>Reservation</td>
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<tr>
<td>Total</td>
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<tr>
<td>5902</td>
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## Accounts 31.12.2014

<table>
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<td>Assets</td>
</tr>
<tr>
<td>Accounts</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Total</td>
</tr>
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<tr>
<td>953</td>
</tr>
</tbody>
</table>

**The Cardionetwork Foundation – Annual Report 2014**
CARDIONETWORKS’ MISSION

“To improve medical knowledge, especially in the field of cardiology, and to provide access to this knowledge by facilitating publications in digital or other form, amongst other by building and maintaining websites.”
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Registered with the Chamber of Commerce Amsterdam
KVK 34274298

The Dutch Tax Administration has designated the Cardionetworks Foundation
as an Institution for General Benefit (ANBI, Algemeen Nut Beogende Instelling).
Gifts to the Cardionetworks Foundation can be tax deducted in the Nether-
lands. This not only applies to the deduction of donations for the income tax but
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