Cardionetworks in Brief

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 vanderbilt@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 2011 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 that the number of visitors to Cardionetworks websites continues to increase. Over 700,000 unique visits to our websites were logged in 2011. In total more than 2 million pageviews were logged, and the average time each visitor spent on the website was more than 4 minutes. Our global reach now extends to 212 countries, and we are particularly proud that increasing numbers of our visitors are located in developing countries.

Although fundraising is challenging in tougher economic era, we were able to raise enough funds to create a buffer for the medium-term future of Cardionetworks. Additional funds were used in 2011 to expand and increase the quality of the website content, and to move all websites to two stable, dedicated servers with hourly backups.

Our future plans focus on continuing to increase the quality of our current websites. In collaboration with the Health[e]Foundation we strive to finish the first version of the Textbook of Cardiology. Also, an iBook version of the ECGpedia website is under development. The focus for 2012/2013 will be to improve Echopedia.org. The second most visited website of the foundation.

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. The foundation board is grateful for all the work and time they have invested to make this project such a success.

Cardionetworks foundation board.

Jonas de Jong, MD
Ivo van der Bilt, MD
Martijn Meuwissen, MD, PhD
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). An increase in traffic was noted after the loading times of the websites was improved by implementing a new webserver and improving the information workflow.

The majority of visitors located the site through a search engine. A variety of search terms were used to locate the site, including “qtc calculator”, “intraventricular conduction”, “idioventricular rhythm”, and “lbbb”, demonstrating the genuine need for this service.

**The majority of visitors located the site through a search engine, demonstrating the genuine need for this service.**
A total of 78% of visitors were new to en.ecgpeda.org and 56% were new to nl.ecgpeda.org during 2011, suggesting that our marketing efforts during this year were successful. These figures also indicate the presence of a substantial pre-existing user-base for both language versions.

The geographical distribution of visitors to en.ecgpeda.org is shown in the map. The majority of users continue to be based in English-speaking countries (60.8% of site visits were from the US, UK, Canada or Australia in 2011). However, visitors from countries such as India, the Philippines and Malaysia represent a significant proportion of our users.
HIGHLIGHTS OF 2011

• Over 2.3 million visits from 212 countries logged, with average visit lasting more than 4.10 minutes
• ECG archive expanded to include more than 2500 ECGs
• In collaboration with the Heatl[e]Foundation work on the Textbook of Cardiology has begun
• Server upgraded once more to meet continuing and increasing demands.
• On request of Wikipedia, Cardionetworks agreed to share images with Wikipedia.

December 2011
• 10,000,000th pageview recorded on ECGpedia
• Cardionetworks foundation website redesigned
• Pocket reference cards of PClpedia and ECHOpedia published
• Moodle.ecgpedia.org online in a test version, a formal version of the ECG course with exam questions. Also free.

March 2011
• Work on an up-to-date online Textbook of Cardiology has commenced

January 2011
• Signed agreement with Wikipedia to allow usage of images and contents of ECGpedia on Wikipedia

December 2010
• The Dutch Tax Administration has designated the Cardionetworks Foundation as an Institution for General Benefit (ANBI, Algemeen Nut Beogende Instelling), making gifts tax deductible in The Netherlands.

August 2008
• Martijn Meuwissen, MD, PhD, cardiologist, joins the board of the Cardionetworks Foundation.

April 2008
• 1,000,000th pageviews recorded on ECGpedia.
• Launch of the De Voogt Archive, an online ECG archive housing more than 2000 ECGs.
March 2008

- Conclusion of a successful fundraising campaign. Premium donations received from Novartis, St. Jude Medical, Philips Medical and Boston Scientific.

November 2007

- 120,000th visitor logs on to the Dutch ECG site.

September 2007

- Foundation awarded first prize for ‘young talent’ at a Dutch e-learning symposium.

August 2007


July 2007

- A total of 90,000 visits to the Dutch site and 4,500 to the English site recorded. Google has 673 search-hits on ‘ECGpedia’.

May 2007

- Translation of ECGpedia from Dutch into English initiated. Launch of en.ecgpedia.org.
- Founding of the Cardionetworks Foundation.

March 2006

- Launch of nl.ecgpedia.org.

February 2006

- Launch of ECGpedia.nl.

April 2005

- First online Dutch ECG course available at www.drj.nl.
Cardionetworks: Resources

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, and ask contributors only to post statements that are true and correct. All edits are screened by physician moderators.

Anyone can contribute to Cardionetworks; we welcome all improvements to our websites

A complete list of our websites is given below.

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 it’s 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. Recent additions include case reports by Vincent de Rover, who is a pacemaker technician. 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 in a test version (moodle.ecgpedia.org). In addition, an iBook version of the website is being developed.
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 participants for cardiovascular education. In collaboration the textbook is now being written. It will be made available online by Cardionet-works and offline by the Health[e]Foundation which will include the text on USB sticks that are distributed through their network.

Editors
Jonas S.S.G. de Jong, MD, AMC, The Netherlands
Fransje van der Waals, MD, PhD, The Netherlands

Authors
Renée van den Brink, MD PhD, AMC, The Netherlands
Peter Damman, MD, AMC, The Netherlands
Ronak Delewi, MD, AMC, The Netherlands
James Heilman, MD, CCFP-EM, Clinical Assistant Professor
Tim van de Hoef, MD, AMC, The Netherlands
S. Yen Ho, PhD FRCPath FESC FHEA, Royal Brompton Hospital, UK
John Kastelein, MD, PhD, AMC, The Netherlands
Wouter Kok, MD, PhD, AMC, The Netherlands
Sébastien Krul, MD, AMC, The Netherlands
Barbara Mulder, MD, AMC, The Netherlands
Ineke Nederend, AMC, The Netherlands
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 Wiegerinck, AMC, The Netherlands
Janneke Wittekoek, MD, PhD, The Netherlands
Pier Woudstra, MD, AMC, The Netherlands

Illustrations
Ties van Brussel, Msc, AMC, The Netherlands
J.P.M. Hamer, MD, PhD
Shayne Morales, The Phillipines
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. Currently, the biggest challenge for the website include attracting authors to improve the textual content. Even though content is far from complete, Echopedia has seen a strong increase in it’s number of visitors.

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 in 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.
Foundation Websites

<table>
<thead>
<tr>
<th>brugadadrugs.org</th>
<th>congenitalcardiology.org</th>
</tr>
</thead>
<tbody>
<tr>
<td>cardiacintervention.org</td>
<td>crmpedia.org</td>
</tr>
<tr>
<td>cardiacintervention.com</td>
<td>ctgpedia.org</td>
</tr>
<tr>
<td>cardiacultrasound.org</td>
<td>ecgpedia.org</td>
</tr>
<tr>
<td>cardioknowledge.com</td>
<td>ecgpedia.mobi</td>
</tr>
<tr>
<td>cardioknowledge.org</td>
<td>echopedia.org</td>
</tr>
<tr>
<td>cardiolinks.org</td>
<td>echopedia.com</td>
</tr>
<tr>
<td>cardiomedia.org</td>
<td>ekgpedia.org</td>
</tr>
<tr>
<td>cardionetworks.org</td>
<td>ekgpedia.dk</td>
</tr>
<tr>
<td>cardionetworks.com</td>
<td>eppedia.org</td>
</tr>
<tr>
<td>cardiopedia.org</td>
<td>failingheart.org</td>
</tr>
<tr>
<td>cardiovasculargenetics.org</td>
<td>failinghearts.org</td>
</tr>
<tr>
<td>cardiovascularsurgery.org</td>
<td>gynpedia.org</td>
</tr>
<tr>
<td>casesincardiology.org</td>
<td>heartfailurepedia.org</td>
</tr>
<tr>
<td>clotpedia.org</td>
<td>hfppedia.org</td>
</tr>
<tr>
<td>cmrppedia.org</td>
<td>icdpedia.org</td>
</tr>
<tr>
<td></td>
<td>medicalslides.org</td>
</tr>
<tr>
<td></td>
<td>medisheillustraties.nl</td>
</tr>
<tr>
<td></td>
<td>medslides.org</td>
</tr>
<tr>
<td></td>
<td>mrripedia.org</td>
</tr>
<tr>
<td></td>
<td>obgynpedia.org</td>
</tr>
<tr>
<td></td>
<td>pacemakerpedia.org</td>
</tr>
<tr>
<td></td>
<td>pcipedia.com</td>
</tr>
<tr>
<td></td>
<td>pcipedia.org</td>
</tr>
<tr>
<td></td>
<td>pmpedia.org</td>
</tr>
<tr>
<td></td>
<td>textbookofcardiology.com</td>
</tr>
<tr>
<td></td>
<td>textbookofcardiology.org</td>
</tr>
<tr>
<td></td>
<td>thefailingheart.org</td>
</tr>
<tr>
<td></td>
<td>thrombopedia.org</td>
</tr>
<tr>
<td></td>
<td>trombopedia.org</td>
</tr>
<tr>
<td></td>
<td>wiki-nvro.nl</td>
</tr>
</tbody>
</table>

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 6000 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
Foundation Board

Jonas de Jong, MD. Chair
Cardiologist
Academic Medical Centre, University of Amsterdam
The Netherlands.

Ivo van der Bilt, MD. Secretary
Cardiology resident
Academic Medical Centre, University of Amsterdam
The Netherlands.

Martijn Meuwissen, MD, PhD. Treasurer
Cardiologist
Amphia Hospital, Breda,
The Netherlands
Scientific Advisory Board

R.B.A. van den Brink, MD, PhD
Cardiologist and Dean of Cardiology,
Academic Medical Centre,
Amsterdam, The Netherlands.

Prof. A.A.M. Wilde, MD, PhD,
Cardiologist and Head of the Department of Cardiology,
Academic Medical Centre,
Amsterdam, The Netherlands.

Prof. H.J.J. Wellens, MD, PhD,
Emeritus Professor of Cardiology,
Cardiovascular Research Institute Maastricht,
The Netherlands.
Volunteers

Our co-workers and volunteers come from across the world

The Netherlands

Pieter Postema: Founder and creator of BrugadaDrugs.org

Vincent de Rover: Pacemaker technician, provided interesting ECG cases

Prof. Arthur Wilde: Continues to provide arrhythmia cases to the website.

Argentina

Dr Alberto Giniger
Chief of the Electrophysiology and Arrhythmias Department of the Instituto Cardiovascular de Buenos Aires (ICBA). Provided interesting arrhythmias cases.

Philippines

Shayne Morales
Created illustrations and did a lot of the handwork: adding logos and courtesy notices to images and videos, basic layout improvement.
Benefactors of the foundation

Medtronic

MSD

Servier

Abbott Vascular
## Financial Report

### Bank Account 31-12-2010

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefactors</td>
<td>13637</td>
<td>Contributions and insurances</td>
<td>411</td>
</tr>
<tr>
<td>Reference card revenues</td>
<td>1073</td>
<td>Webhosting costs</td>
<td>2558</td>
</tr>
<tr>
<td>Gifts through website</td>
<td>25</td>
<td>Content development and office costs</td>
<td>4597</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>14735</td>
<td>Banking and advising costs</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reservation</td>
<td>6102</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Refunded temporary loan 2010</td>
<td>1000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>14735</td>
<td><strong>Total</strong></td>
<td>14735</td>
</tr>
</tbody>
</table>

### Bank Account 31-12-2011

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts</td>
<td>8163</td>
</tr>
<tr>
<td>Capital</td>
<td>8163</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>8163</td>
</tr>
</tbody>
</table>

### Balance sheet 2011

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts</td>
<td>8163</td>
</tr>
<tr>
<td>Capital</td>
<td>8163</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>8163</td>
</tr>
</tbody>
</table>
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.”

Contact

The Cardionetworks Foundation
http://www.cardionetworks.org
info@cardionetworks.org

VAT number NL8179.99.474B01
ING Bank account IBAN NL55PSTB0002382426
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 Netherlands. This not only applies to the deduction of donations for the income tax but also to the company tax and inheritance tax.
Contents of Cardionetworks Foundation websites are available under a Creative Commons Attribution-Noncommercial-Share Alike Licence, which means you are free:

- **Share** — to copy, distribute and transmit the work

- to **Remix** — to adapt the work

**Under the following conditions:**

- **Attribution.** You must attribute the work in the manner specified by the author or licensor (but not in any way that suggests that they endorse you or your use of the work).

- **Noncommercial.** You may not use this work for commercial purposes.

- **Share Alike.** If you alter, transform, or build upon this work, you may distribute the resulting work only under the same or similar license to this one.

Image attributions: Doctor front page: Anoto AB@Flickr. Strato datacenter by Strato. Stethoscope front page: David DeHoey@Flickr.