

# HeartRepair

2010

## Is this The End?

On this last HeartRepair flyer, our logo is showing five red heart cells, symbolising five years of ‘excellent scientific productivity’\*..Much has been achieved, but as the seven blue cells indicate: even more still is to be done. This won’t be in the HeartRepair setting, though. Since our 2006 kick-off, over a hundred participants have been advancing heart research by working together, meeting each other, testing new ideas, asking hard questions and collecting as many fragments of the answers as possible. By doing so, they built a virtual research network out of real labs and real people. In this flyer you find Antoon Moormans cry for the future and a lot of anonymous compliments.

\* See quotes of an anonymous EU HeartRepair reviewer on page 3:

HeartRepair used the lessons of the embryo to facilitate cardiac repair. Four cooperative R&D lines have been formulated within HeartRepair.

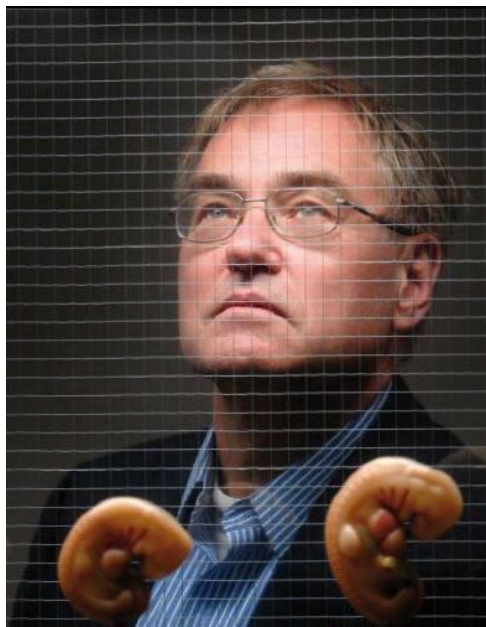
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Heart Failure and Cardiac Repair

[www.heartrepair.eu](http://www.heartrepair.eu)



SIXTH FRAMEWORK PROGRAMME



## Yield versus costs

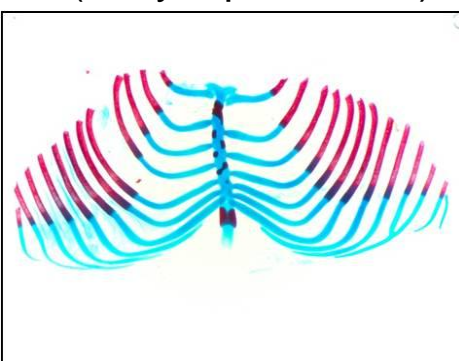
**Wouldn't it be nice to have a European version of the Weinstein meeting? "All you need is 15.000 euro," consortium-leader Antoon Moorman says.**

Moorman regrets the HeartRepair project being over and no follow-up meetings being planned yet. "I've had an easy time, managing Heartrepair, really. Writing the proposal was the hardest part, because of the immense amount of paperwork. I had

to postpone my holidays for that. In HeartRepair, for the first time in history, we teamed-up almost everyone in Europe working on the molecular development of the heart. The scientific yield has been immense. Patient cohorts are being sequenced as we speak, the results will be presented on our next, hopefully not our last, meeting. Our meetings are quite cheap, about € 15.000, that is €100 per person if they pay their own travel to Amsterdam and their own hotel expenses. But if there is no budget, nobody will start organising. So we really need € 15.000 a year to keep the HeartRepair format running."

## Looking for cardiac malformations, finding funny bones. Asymmetric sternum, a new dysmorphic feature in humans

While studying a mouse deficient for a gene expressed in the developing heart, Marc Sylva (PhD student, HeartRepair) noticed that some mutants have their ribs attached asymmetrically (i.e. alternating) to their sternum. By examining the hospital's CT-archive, Sylva showed that this condition is also present in a small percentage of humans; a previously unreported dysmorphic feature in humans. (not yet published.) ▼



One day old mouse (left) and CT-reconstruction of a human sternum (right). Note the asymmetric rib-sternal attachments.



## Heart Repair: A European ‘research powerhouse’

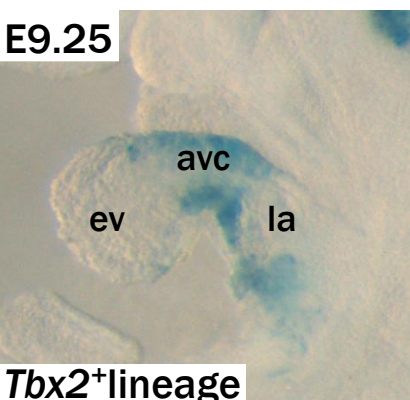
HeartRepair has been reviewed three times now. We would like to share with you here some of the nice things our anonymous EU-reviewer wrote about the project and its participants.

**2006** Achieving all planned deliverables is a manifestation of excellent scientific productivity (...) 80 scientific presentations and 35 publications in rated professional journals is very impressive (...) the joint research performed by the team as a whole is excellent (...) financial management of the project is very sound and efficient.

**2007** The HeartRepair project is an exemplary and high profile research project with long lasting potential impact (...) exceptional performance by the group of researchers (...) The costs incurred were very economical. (...) This project has created a new European culture of collaborative rather than competitive research (...) I cannot identify any evidence of conflicts or underperforming partners or lack of commitment.

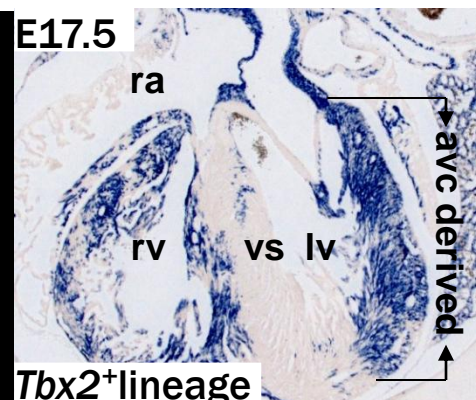
**2008** The project has fully achieved its objectives and technical goals for the reported period and has even exceeded expectations (...) The assembled group of researchers represents a productive and outstanding voice for communicating and advancing cardiovascular regenerative medicine, not only in Europe but also globally (..) The Integrated Project “Heart Repair” represents a European research powerhouse in advancing the field of heart repair and cardiac stem cell therapy.(...) it is anticipated that clinical significance and relevance will remain very high

*Source: HeartRepair Review reports (2006, 2007 and 2008)*



Previously the embryonic ventricle was thought to form the entire left ventricle. Surprisingly, after labeling the AV canal, we found that the embryonic ventricle only forms the left ventricular septum and apex, the rest of the left ventricle is formed by recruitment of AV canal cells.

Aanhaanen et al Circ Res 2009



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