MOSAICS - Hearing Matters
European Industrial Doctorate to train experts in auditory implants for minimized outcome spread and maximized participation in society

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Cochlear Limited (ASX:COH)

The global leader in implantable hearing solutions

- Cochlear/Hybrid implants
- Bone conduction implants
- Acoustic implants

- ~ 3400 employees
- Direct operations in 20+ countries
- R&D investment ~ 13% of revenue
- > 100 research partners
Cochlear in Belgium (Mechelen)

- Established in 2000
- Employs ~ 120 staff
  - Cochlear Technology Centre (CTC)
  - Cochlear Benelux: sales & support
  - Cochlear Academy (EU training centre)

<table>
<thead>
<tr>
<th>CTC</th>
<th>Origin of Cochlear Technology Center</th>
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<td><strong>Milestones</strong></td>
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<td>1979 CI research started at University of Leuven, St-Augustinus Hospital</td>
<td>1987 First implantation at St-Augustinus Hospital</td>
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<td>Antwerp, University of Antwerp</td>
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<td>Leuven Antwerp University and Research Auditory prosthesis (KU Leuven)</td>
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<td>Prof. Moser (TNO), Dr. Offret (TNO) and Prof. Peeters (UA)</td>
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**CTC**

- Largest R&D centre outside Australia
- 75 R&D staff
Expanding our research capacity

Seeking co-funding is very important for our EU innovation hub.
- additional budget, allowing to accelerate the research
- allows us to engage in more risky, long-term projects
- Strengthens/expands our research and technological partnership networks

Regional
- Baekeland PhD mandates
- Research and Development grants (O&O)

European programs
- AAL, Active Assisted Living Programme (*)
- H2020 FET-Open: BionicVest
- ITN networks: AUDIS, iCanHear, iCARE, TiNACT
- EID: MOSAICS (*)

(*) Cochlear: project coordinator
MOSAICS: Why large outcome variability with cochlear implants?

- Variability is a hard problem.
  - Basic science not well understood.
  - PhD formula is attractive
- Research topics
  1. Diagnostics (ear): Electrode neural interface
  2. Diagnostics (brain): cognitive factors
  3. Treatment: Fitting & Rehab
  4. Impact on Quality of Life
MOSAICS Project Overview

- **2 beneficiaries**: CBNV and RUMC
- **8 partner organizations**: MHH, VU Amsterdam, Trinity Dublin, Maastricht, Artinis, Ida Institute, Euro-CIU, and Accelopment
- **4 PhD students**: 50% at CTC + 50% at RUMC
- **Secondments**
- **3 advisory board members**: Dr Isabel Mosnier, Prof Angel Ramos, Dr Sue Archbold

+- 1 043 000 euro – CTC and RUMC

3 years

3 advisory board members

Dr Isabel Mosnier
Prof Angel Ramos
Dr Sue Archbold
MOSAICS Application Process

- We do not have dedicated staff for funding opportunities. We work with consultants.
  - Our research management team keeps a list of possible topics
- Programme selection
  - Consultant agency pointed us to the “European Industrial Doctorate” programme, with fairly high success rates.
- Grant application process
  - Co-design between COH research staff and consultant
    > Cochlear: Scientific content, relevance, selection of partners
    > Consultant: helped with definition of the training programme, engaging partners, budgets, EU administration
  - Started rather late (end of Nov), also due to availability of our partners in the network. Was an intense period
MOSAICS: the application document

Excellence
- Quality, innovative aspects and credibility of the research programme
- WP1, From cochlea to cortex
- WP2, Brain, train, and sustain
- Quality and innovative aspects of the training program
- Holistic approach, doctoral schools, secondments,…

Score
4.40/5.00

Impact
- Career opportunities for the ESRs
- Strengthening the EU’s innovation capacity
- Dissemination

Score
5.00/5.00

Quality & Efficiency
- Consistency of the work plan

Score
4.80/5.00

34 page dense document submitted on 16/Jan/19

93.20% (>70%)
15/May/19
Discussion

• European Industrial Doctorates
  – Attractive formula for a corporate innovation lab seeking collaboration with knowledge centers
    > Topics need to be long term, and suited for academic research
  – Relatively small projects, well funded, no big overhead
    > In the end only 2 beneficiaries. We looked into adding more, but it was not advantageous in terms of the funding model.
    > Doable to be project coordinator

• Working with a consultancy agency was beneficial
  – Application process could have been smoother… Fairly stressful. Start on time!
  – Value adding
    > in the programme selection
    > would not have gotten such a high score on the Impact and Quality & Effectiveness categories
  – They will take on a PM/admin role during the execution of the project
Cochlear®

Hear now. And always