

Industry Engagement

- **Industry Engagement**

- Build Affiliate Member Program
- “...deeper and richer...”
- Maintain relationships with current members

- **Strategy and Goals**

- Develop Value Chain, Partner Benefits
- Identify Gaps and Members
- Engage New Members
- Deepen Existing Relationships – Project Work, Engagement



New Member - Strategies

Engineering bi-directional brain computer interfaces (BBCI)



BBCI

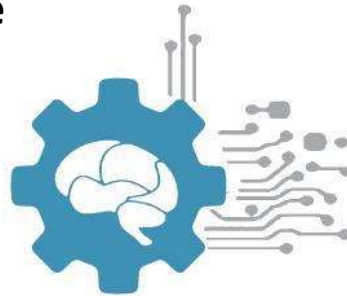


Cyberonics®



Medical Devices

Communication & Interface



Consumer Electronics

Neuroethics



ARM

Computational Neuroscience



Patient Therapy



CENTER FOR SENSORIMOTOR NEURAL ENGINEERING



New Member - Strategies

- **Identifying New Potential Members**

- Neural Engineering Space
- Interest in
 - IP Generated by CSNE Research
 - Medical devices, Other Disease States **SWOT**
 - Commercial Applications **SWOT**
- Philanthropic Groups – Brain, Stroke / SCI Rehab
- Especially focused on Thrust and Test-Bed Areas

Electrodes

Single Chip

Computational Neuroscience

Security

Neuroethics

SoC

Wireless Power

Stroke / SCI Rehab



New Member - Strategies

Where:

- Conferences – IAB, Field
- Who is Faculty working with?
- Initial Proposal Support
- Who are companies working with?
- Who used to be a member?
- Who WANTS to work with our companies?
- Who knows us and switched companies?
- What companies could benefit from SBIRs in this space?
SECOs?



New Member - Strategies

Membership Benefits:

- Faculty expertise
- Student talent
- Collaboration opportunities
- IP and pre-publication research results
- Network of CSNE partners

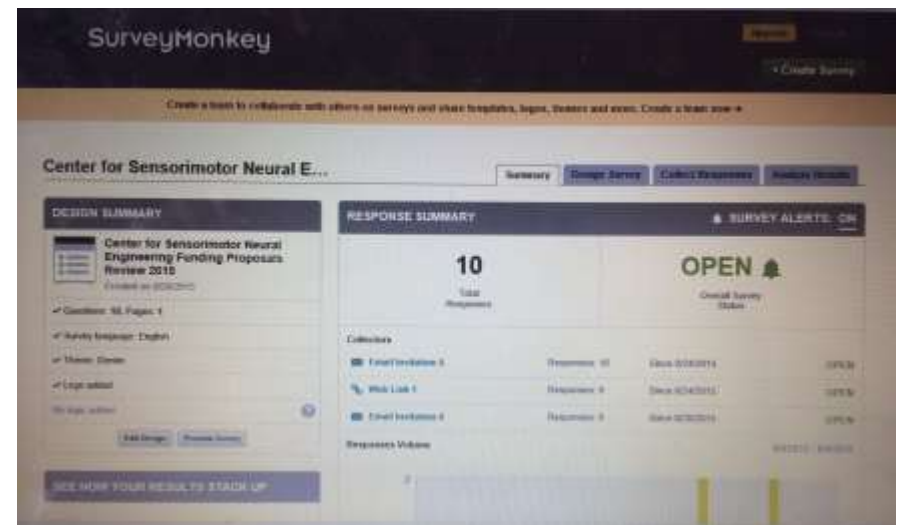
Companies contribute:

- Member fees and project support
- Career opportunities for students
- Feedback on CSNE research
- Subject Matter Expertise



Richer, Deeper...

- EQuIP Calls
- Funding Proposal Reviews
- Tool Kit
- Site Visits / Meetings / Calls
 - Project Ideas
 - Student Lunches
 - Speaking Events
- Individual Membership Program



Industry Projects

Benefits:

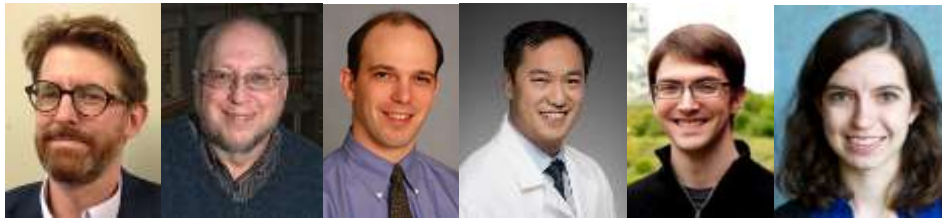
- Deeper Collaboration
- Increased funding for students
- Publications
- Pre-competitive collaboration
- Increased presence within Center
- Hiring opportunities for Students
- Easier renewals
- More obvious Value-Add
- Pull in other members



Highlight: Industry Engagement



- Closed loop DBS and implanted BCI
- \$275K in cash
- \$1 Million in hardware
- Activa PC+S chronic ECoG human trials: First ET patient implanted
- Tech Transfer to Stanford, UCSF



<http://www.medtronic.com/us-en/about/news/dbs-research-university-of-washington.html>



- Large-scale ECoG analysis using cloud-based machine learning
- \$80K in cash
- Collab featured in VP's talk
- ECoG decoding competition: <http://aka.ms/decodesignals>



<https://www.oreilly.com/ideas/connected-brains>



CENTER FOR SENSORIMOTOR NEURAL ENGINEERING



Industry Projects

ABM

GSK

Medtronic

Microsoft

Cyberonics

OpenBCI

Reach Bionics

Ekso Bionics

WRF

White Matter (nano-Z)

NeuroRecovery
Technologies

MultiModal Health

