

Reach Neuro

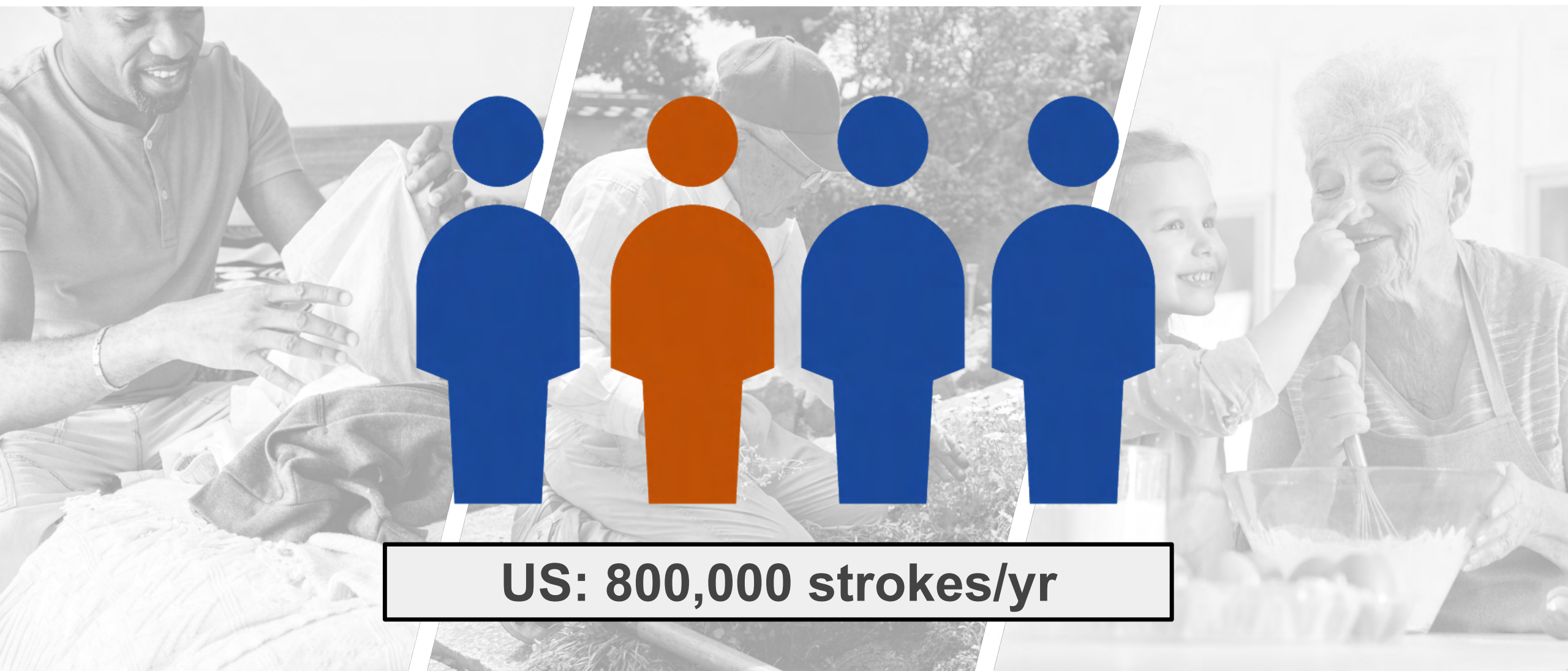
Michael G. Wells Pitch Competition

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Marc Powell, PhD
Marco Capogrosso, PhD
Douglas Weber, PhD
Peter Gerszten, MD
Jordyn Ting



The Impact of Stroke



US: 800,000 strokes/yr

Stroke today

Wake up in the hospital

No upper arm movement

2-3 weeks inpatient

3-6 months outpatient

Progress halts



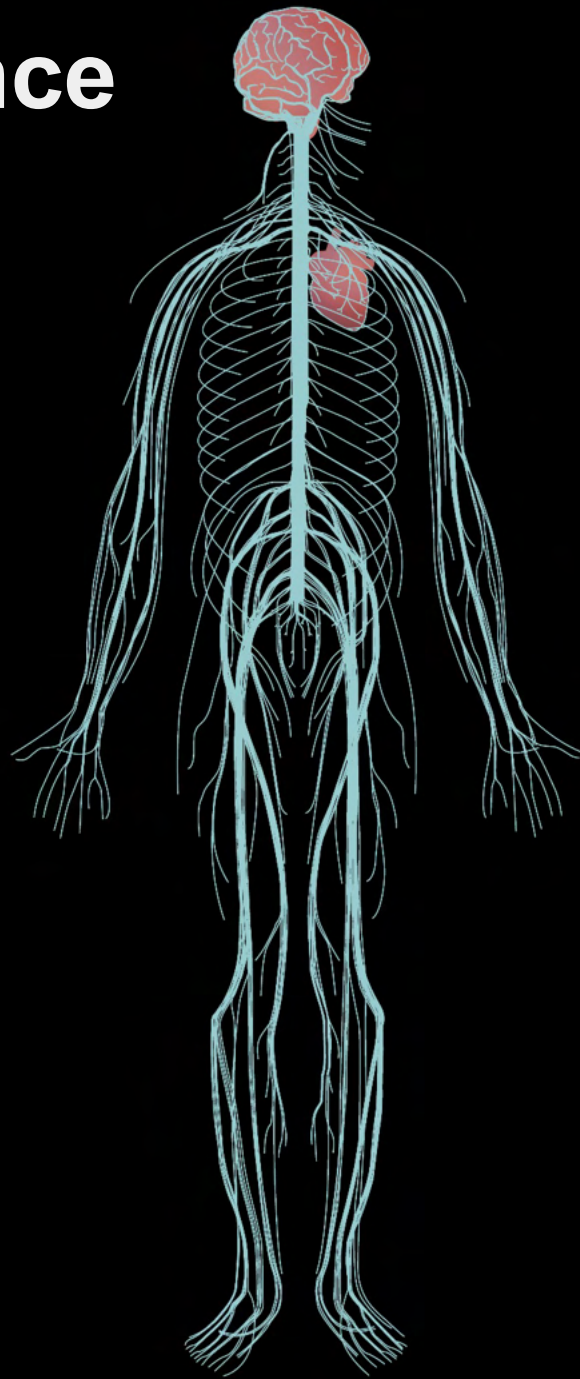
Our mission

Give a **path forward** to chronic stroke patients who are **not making progress** in traditional rehabilitation.

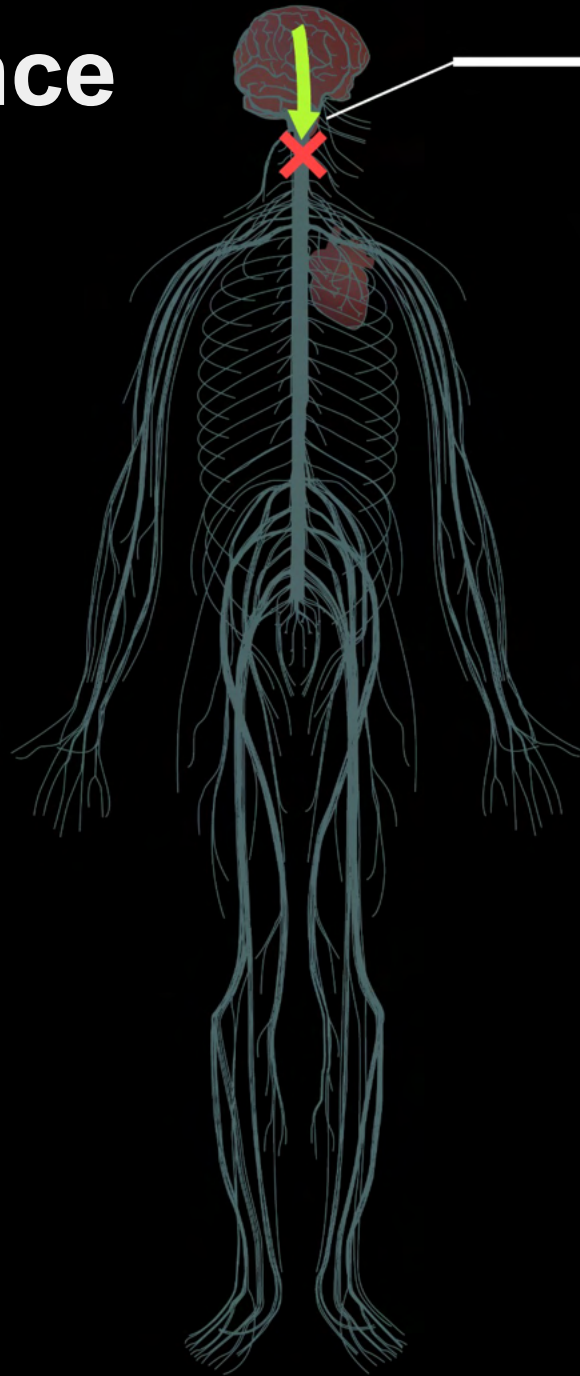
We aim to empower movement through spinal cord stimulation



The Reach difference

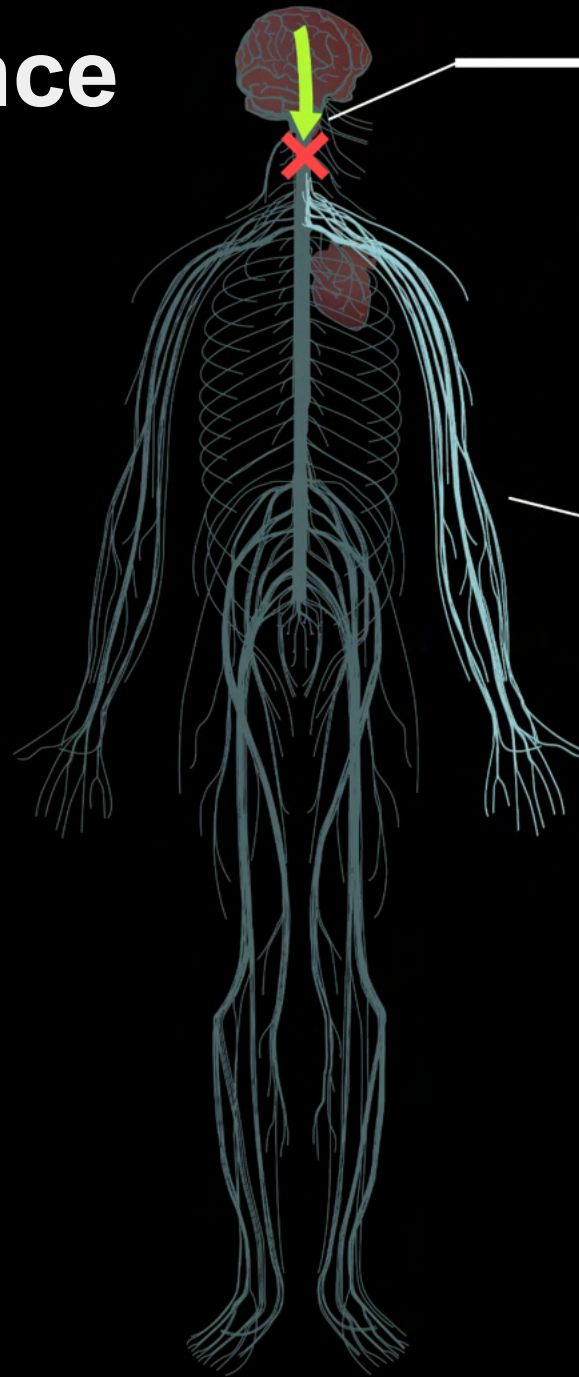


The Reach difference



Stroke damages
decending pathways

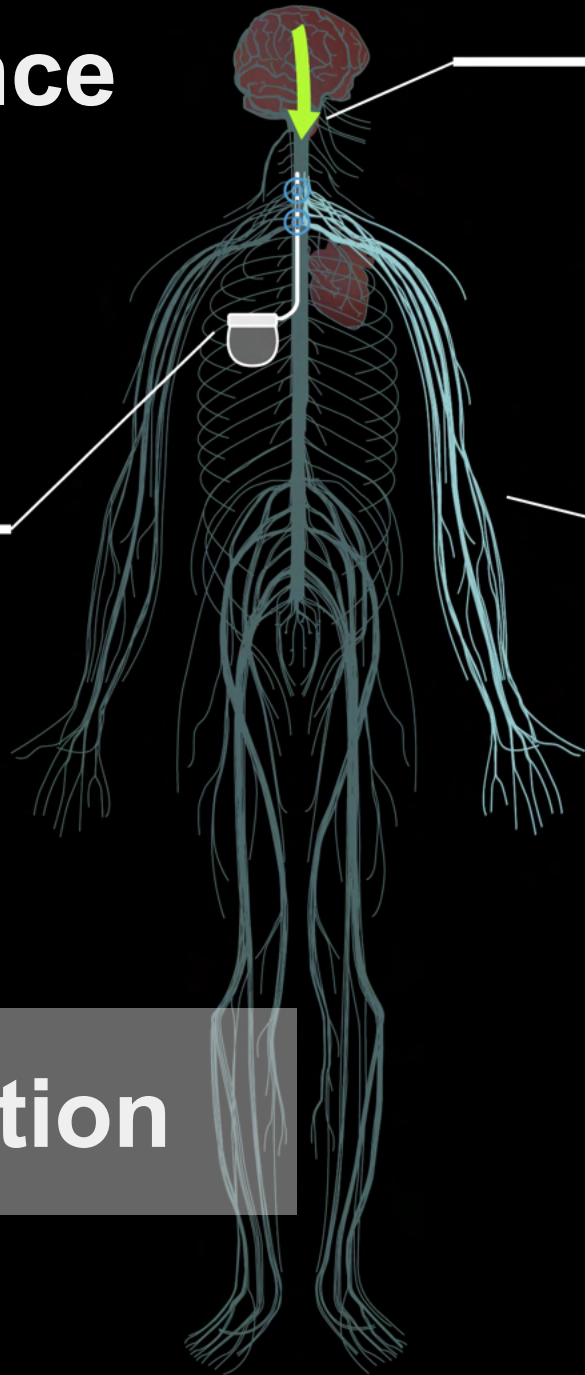
The Reach difference



Stroke damages
descending pathways

Spinal and peripheral
circuits remain intact

The Reach difference



Stroke damages
decending pathways

SCS to reactivate
disconnected spinal
circuits



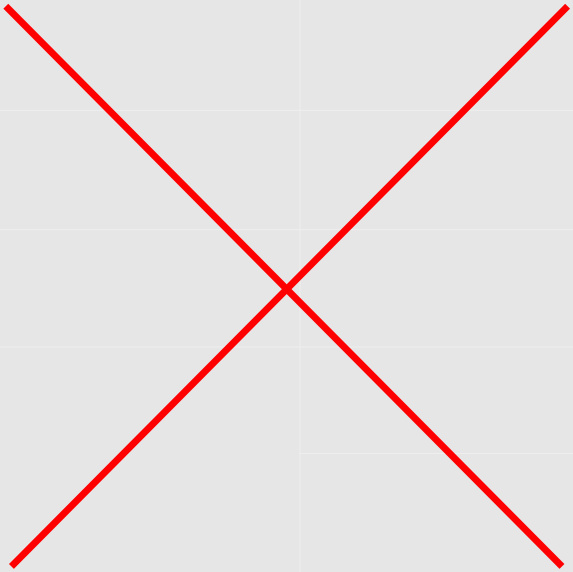




Spinal and peripheral
circuits remain intact

Restore motor function

Key Innovations: Beyond Spinal Cord Stimulation

- **Stimulation parameters** specific for motor recovery (5 years of pre-clinical and human research)
- **Unique spatial patterning** of stimulation
- **Dedicated hardware** capable of delivering innovative stimulation patterns
- Surgical approach tailored to the **cervical spinal cord**
- **Personalization and at-home remote training** for each individual patient

A class of our own

	Muscle activation		Utilization Domain		Other
	Voluntary	Complex	Daily Living	Therapy	Multi-joint
	Blue	Blue	Green	Green	Yellow
			Green	Grey	Grey
			Grey	Green	Grey
			Grey	Green	Yellow
			Grey	Green	Yellow
			Grey	Green	Yellow

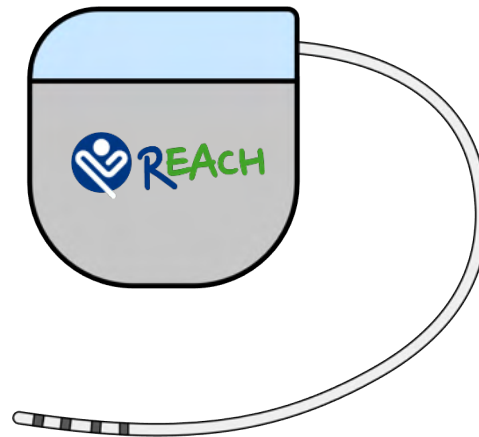
Go-to-market



**Pre-market
Approval**



**Outsource Device
Manufacturing**



**Distribution /
Sales Force**

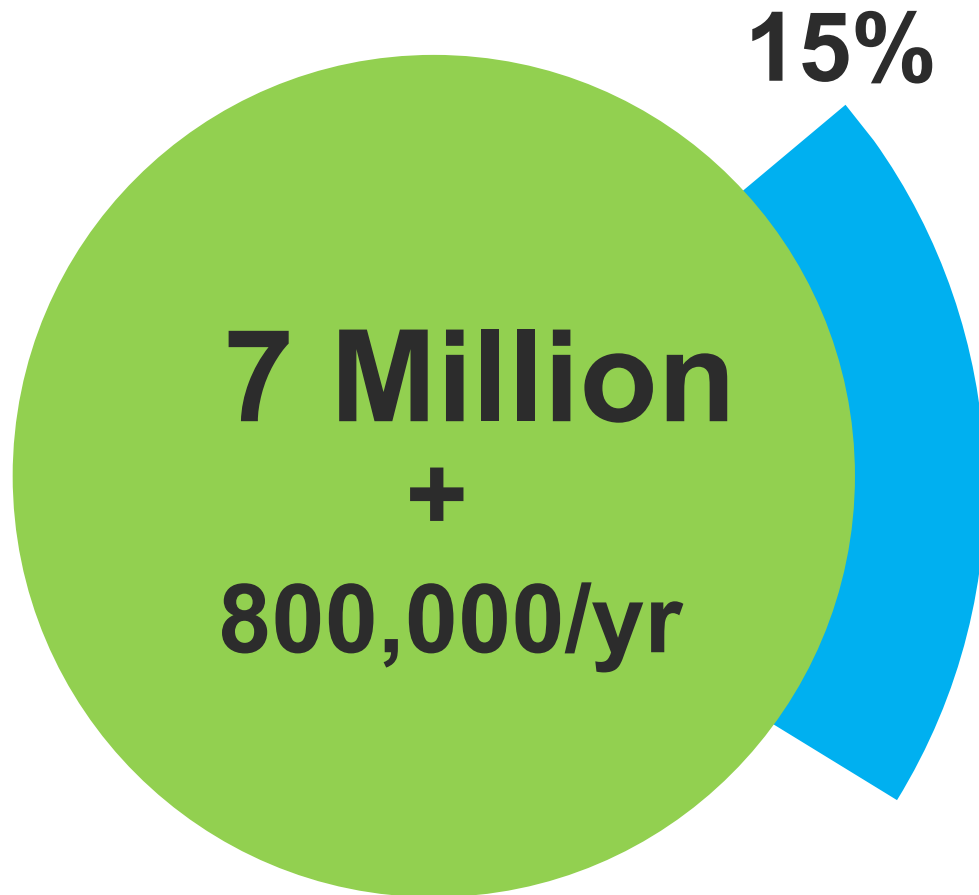


Device Sales Projection

7 Million
+
800,000/yr

Stroke survivors

Device Sales Projection



Chronic upper limb
impairment

120,000/yr

x \$24,000/unit

\$3 Billion

Add-on market: ~1 Million



Achievements

- **UPitt First Gear Program**
- **LifeX Labs Accelerator**
- **CDL-Toronto Accelerator**
- **IndieBio Incubator**
- **First-In-Human Clinical Trial**

Next steps

Seeking \$20,000

1. Convert **intellectual property**
2. Acquire additional **feasibility data**
3. Pre-submission meeting with **FDA**
4. FDA **breakthrough device** designation
5. Submit **SBIR** application

Provisional Patent Filed:
Application No. 63/242,262

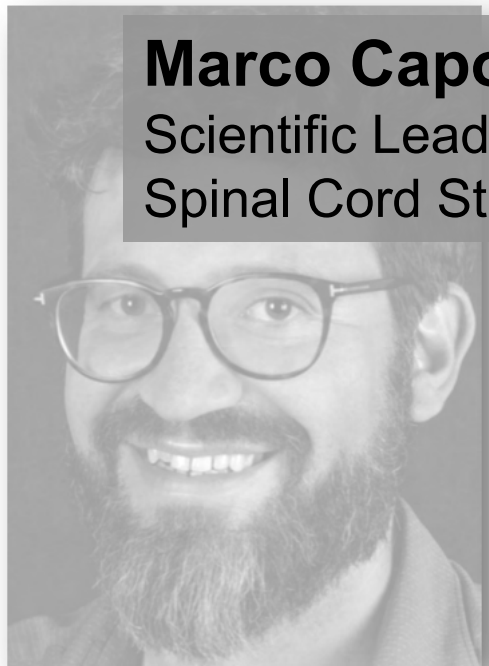
Expense	Cost
Product development	\$8,000
Regulatory consultant	\$5,000
Personnel	\$7,000
Total	\$20,000



Meet our team



Marc Powell, PhD
Team Lead
Neural Interface Design



Marco Capogrosso, PhD
Scientific Lead
Spinal Cord Stimulation



Jordyn Ting
Researcher
Neuromodulation



Doug Weber, PhD
Engineering Lead
Translational Neural Technology

Peter Gerszten, MD
Surgical Lead
Neurosurgeon



Meet our team