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Wearable Technologies Presentation



## Company overview



MC10 takes rigid  
high performance  
**electronics**  
and reshapes them

into human-  
compatible form  
factors that

**S T R E T C H**

bend and twist to  
move with the body

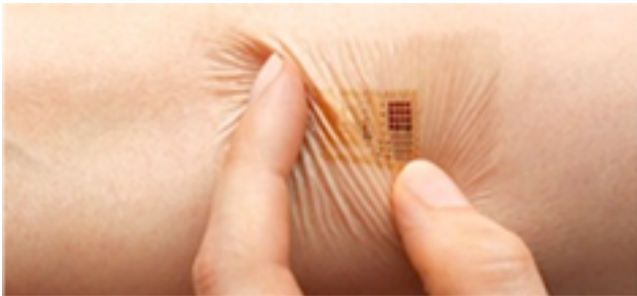
*the* **problem**

Electronics  
are rigid  
and boxy



Humans are soft and curvy

*the* **solution**



Electronics  
that conform  
to humans

Executive Team



**Dave Icke,**  
CEO



**Kevin Dowling,**  
PhD, VP of R&D



**Ben Schlatka,**  
VP of Business  
Development, Co-Founder



**Amar Kendale,**  
VP Strategy & Market  
Development

Meet *our*  
TEAM

Advisors



**John Rogers,**  
PhD, Co-Founder



**Marvin Slepian,**  
MD, Co-Founder



**Carmichael  
Roberts, PhD,**  
Chairman



**John M. Deutch,**  
PhD

Based in Cambridge, MA

Founded in 2008

~30 full-time employees

Venture Capital Partners

Strategic Partnerships



Fact  
SHEET



The Economist

“For years engineers have dreamed of [electronics] that would bend and stretch.



“Electronic ‘skin’ can monitor your heart [and] look and feel more like part of your own body.

A STRONG and growing brand

Recognized in Popular Media....

The New York Times

“Epidermal electronics” may enable constant medical monitoring anywhere.



Bloomberg

WALL STREET JOURNAL



TechCrunch

TIME



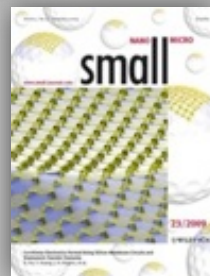
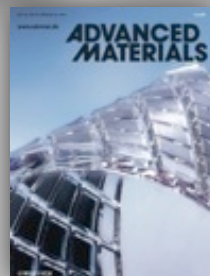
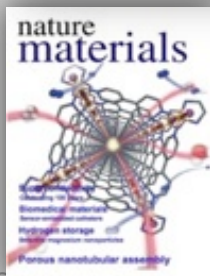
Inc.  
Handbook of the American Entrepreneur

POPULAR SCIENCE  
THE FUTURE NOW

FAST COMPANY



Technology Review  
PUBLISHED BY MIT



# MC10 RECENT press and awards



2012 Winner of the semiconductors and electronics category

# TIME

10 Ideas That Make a Difference

# SCIENTIFIC AMERICAN

World Changing Ideas



WORLD ECONOMIC FORUM



2013 World Economic Forum Technology Pioneer



# APPLICATION a r e a s

CONSUMER  
PRODUCTS



DIGITAL  
HEALTH



MEDICAL  
DEVICE



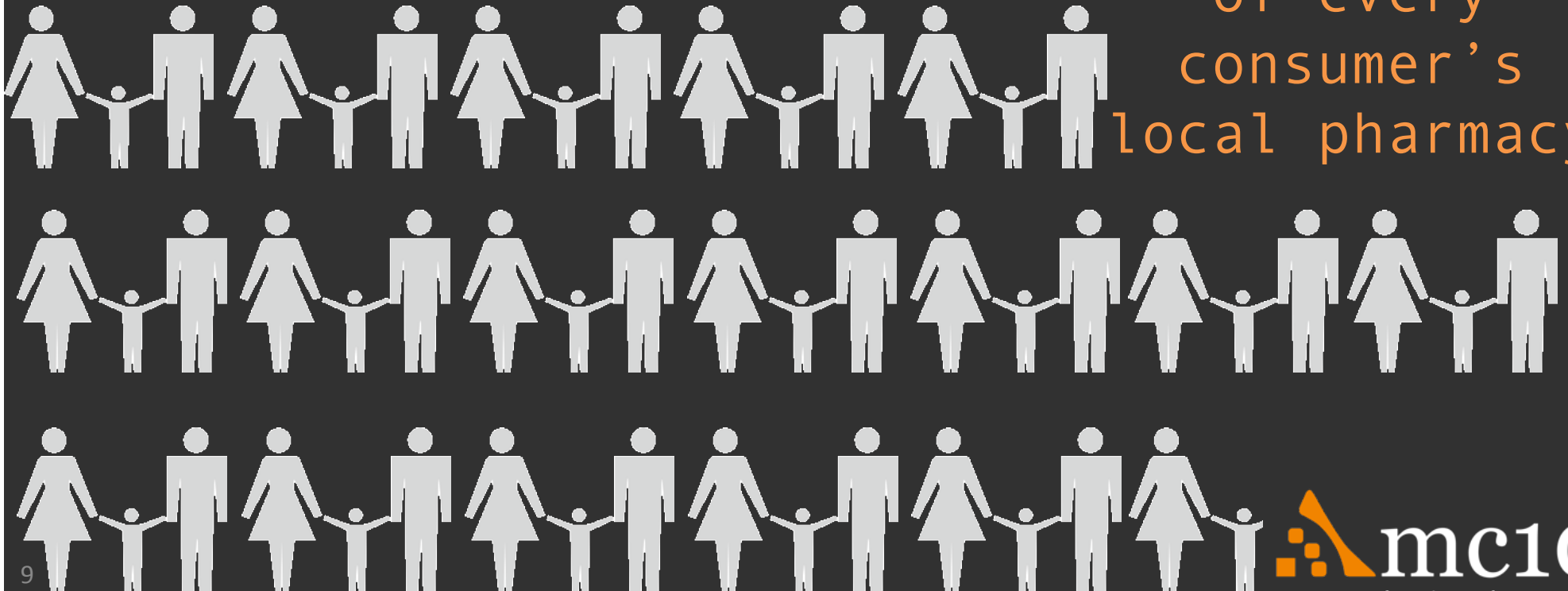


OUR MISSION



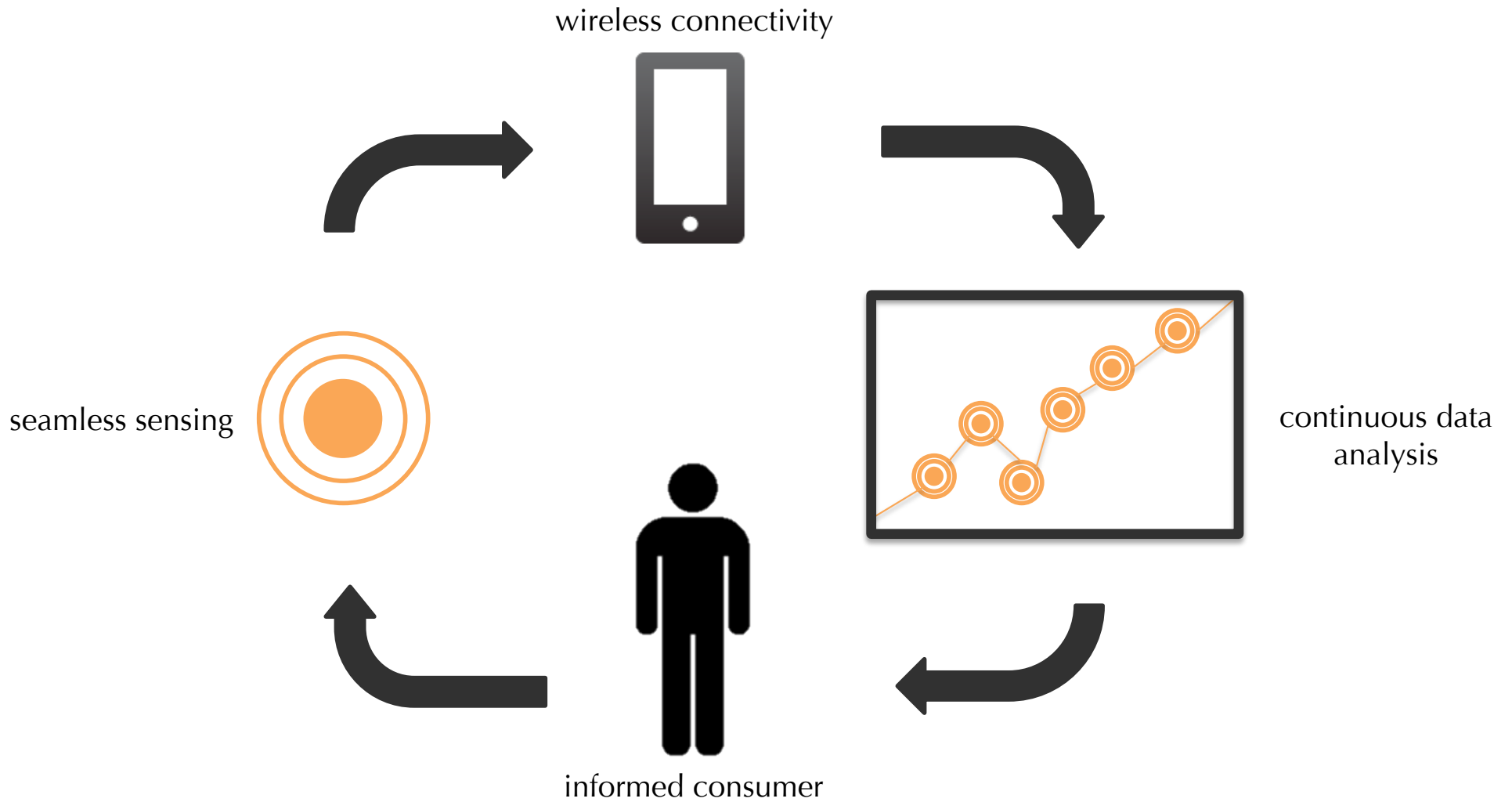
To put  
**best-in-class  
healthcare support**  
*(typically received from a healthcare team)*

on the shelf  
of every  
consumer's  
local pharmacy

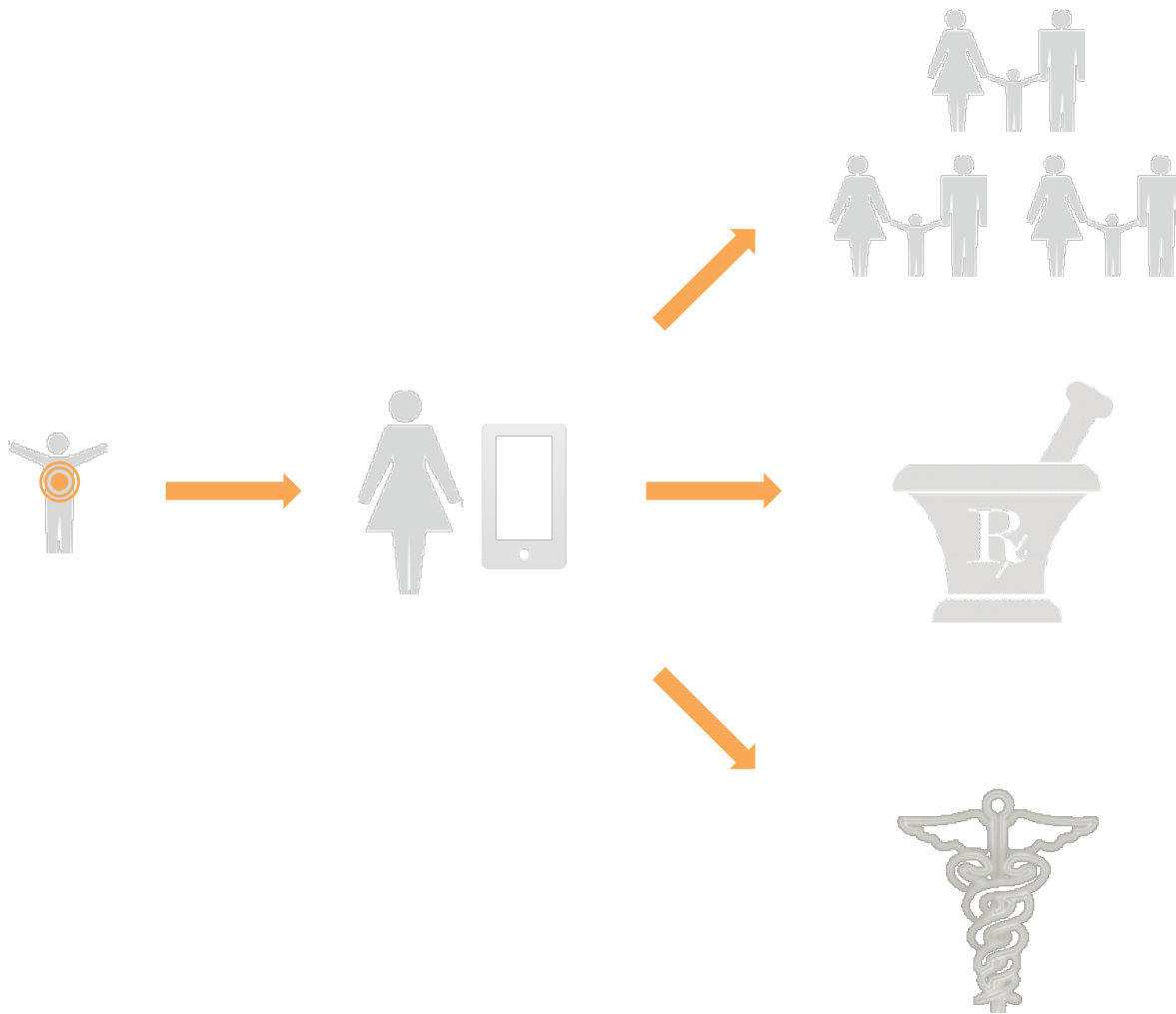


# DIGITAL HEALTH

e c o s y s t e m



# DIGITAL HEALTH ecosystem



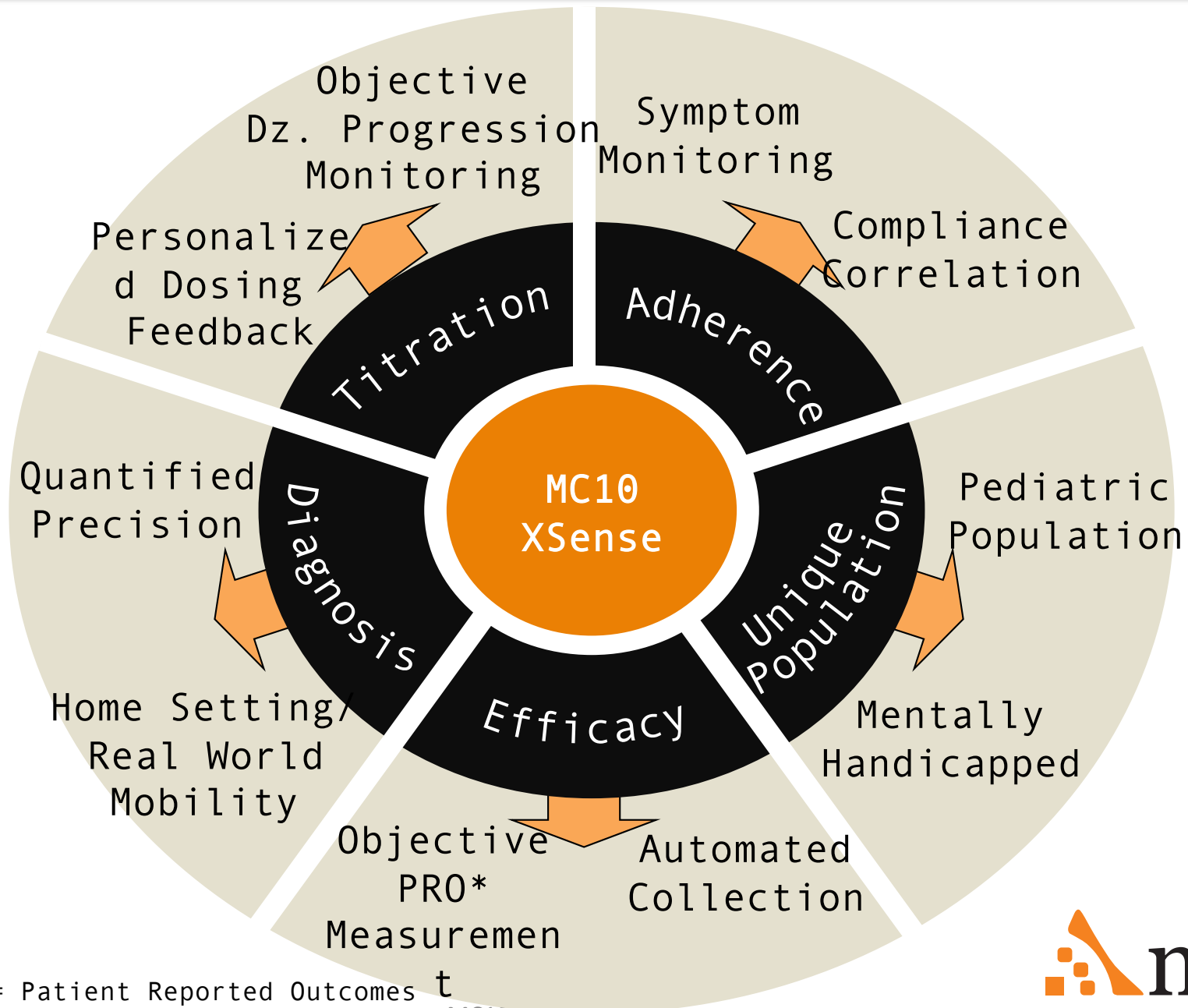
Friends & Family

Community

Drugstores

OTC Manufacturers

Medical Providers



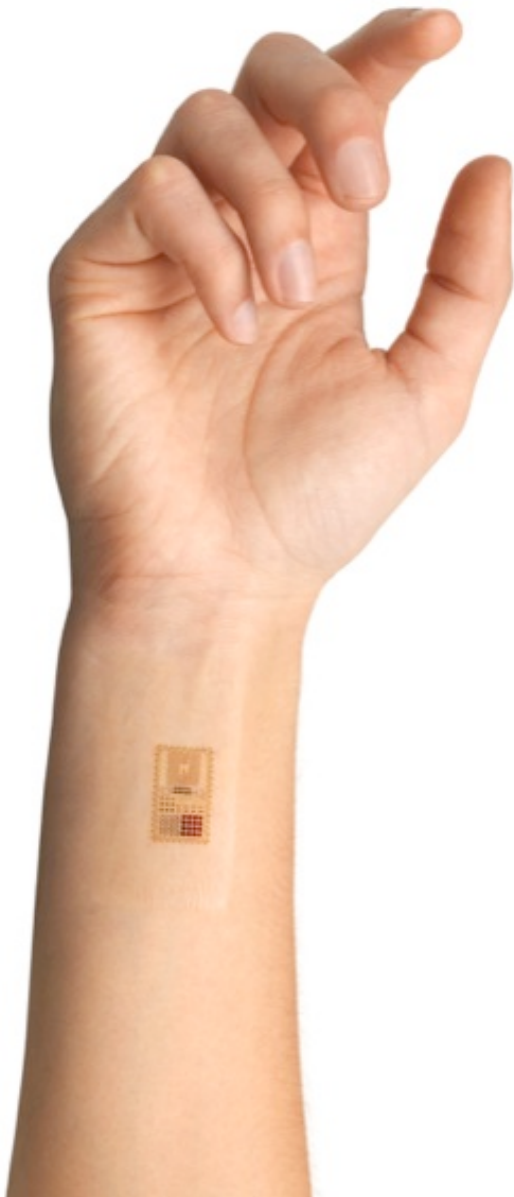
\*PRO= Patient Reported Outcomes

MC10 CONFIDENTIAL



core technology

## MC10 Approach: Based on Three Concepts



Idea #1: Thinning and Embedding



Idea #2: Microtransfer

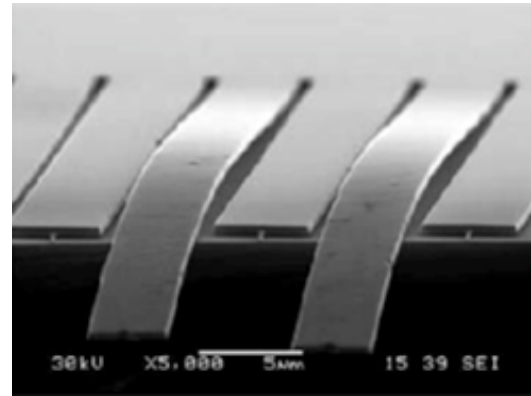
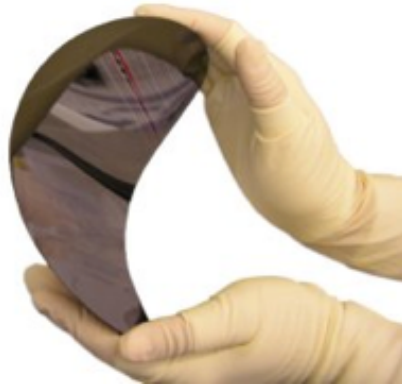
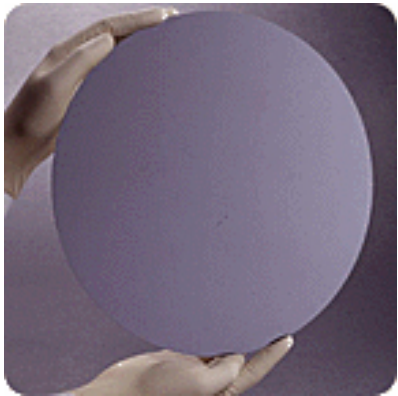


Idea #3: Stretchable Interconnects  
and Encapsulation



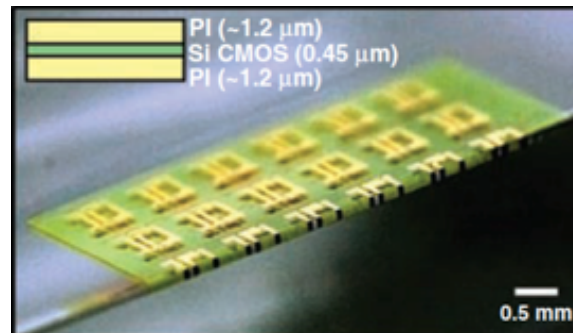
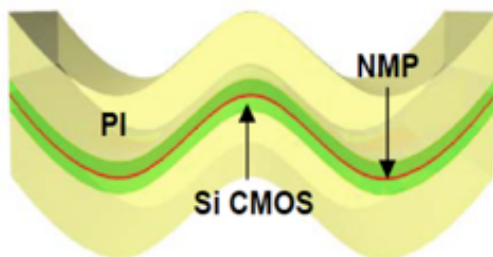
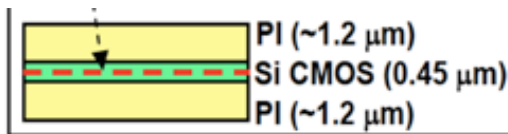
# Idea #1: Thinning and embedding

## THINNING



Thinning silicon makes it flexible.

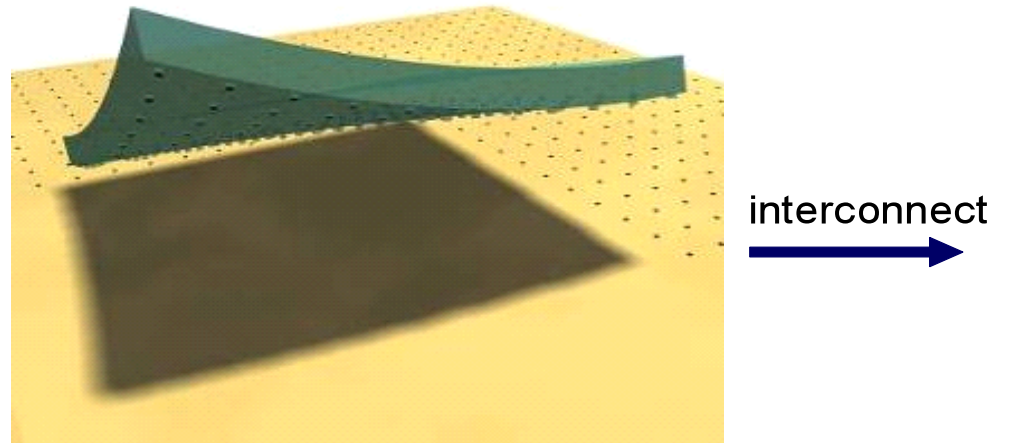
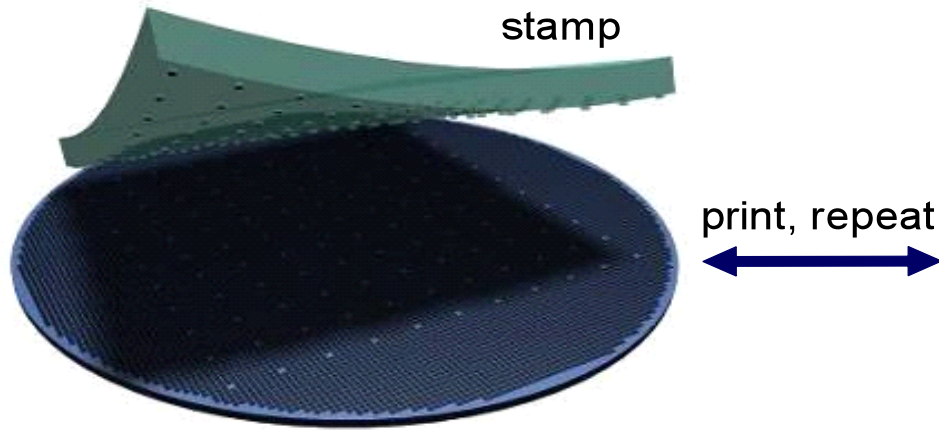
## EMBEDDING



By embedding silicon into composite polymer film, system becomes extremely tough and durable.

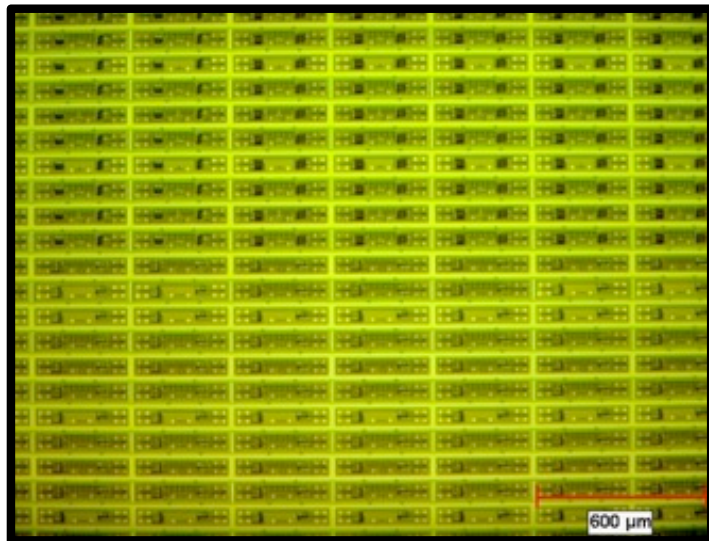


# Idea #2: Microtransfer



Arrays of undercut iLEDs on Wafer

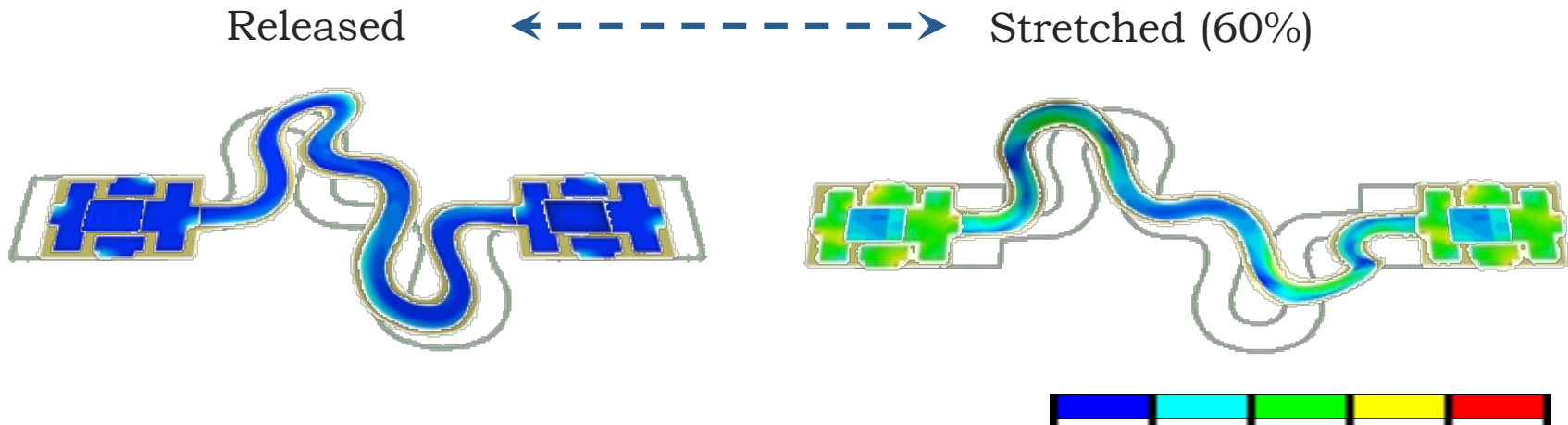
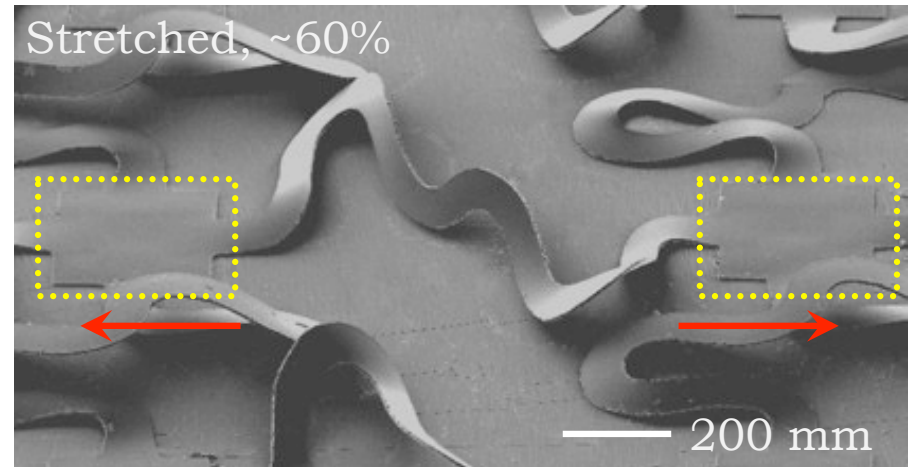
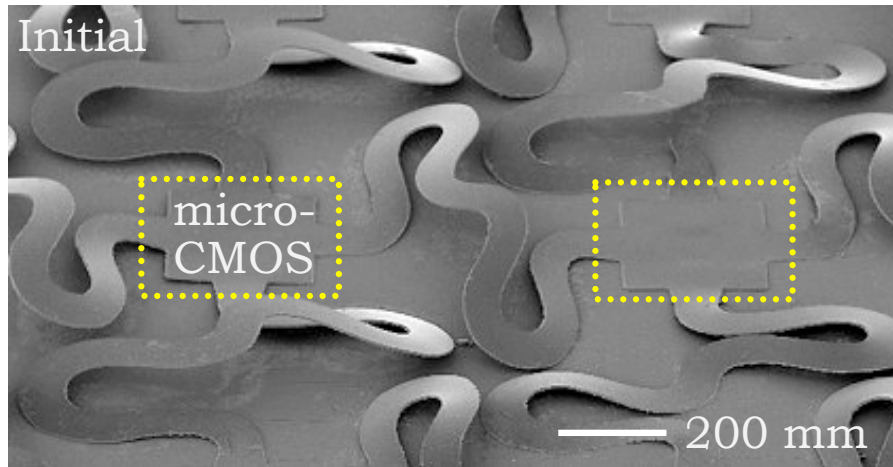
plastic sheet



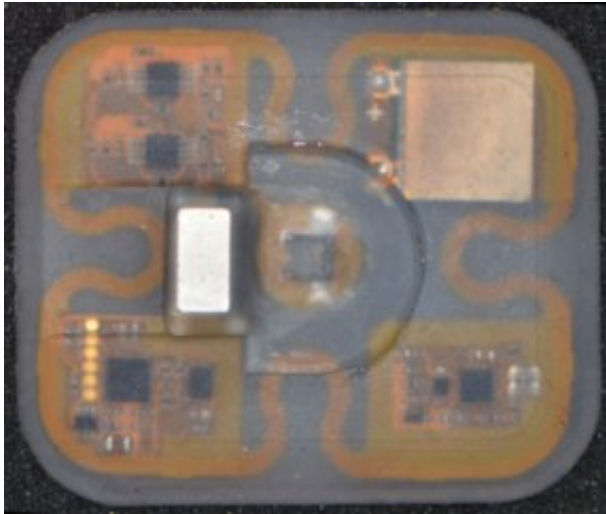




# Idea #3: Stretchable Interconnects

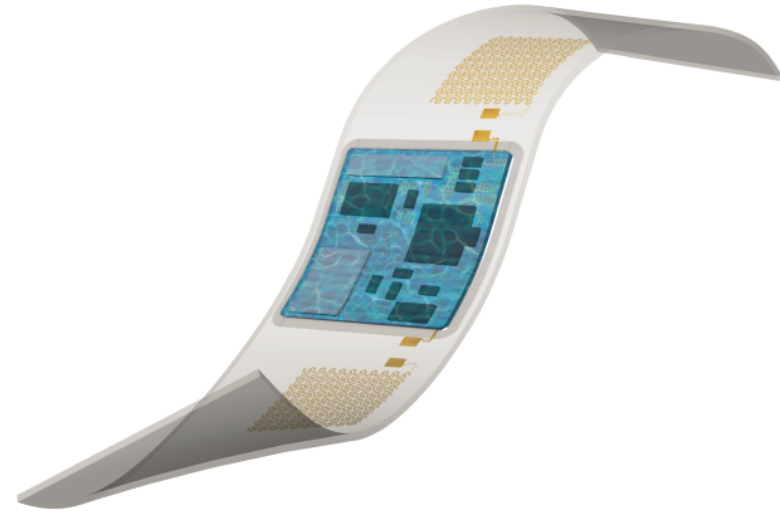
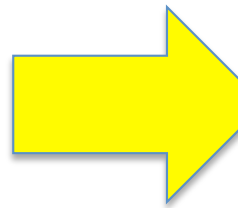


# B E Y O N D P A C K A G E S



Conventional

- Packaged chips
- Large solder pads
- Stiffened islands
- Die-cut flex



Innovative

- No packages
- Low footprint die attach
- Flexible and stretchable throughout volume



Sensing technology

# SEAMLESS s e n s i n g

## Skin Hydration & Firmness

*Onboard hydration and skin stiffness sensors measure skin properties*

## Temperature & Galvanic Skin Response

*Superior thermal and fluidic transport, prevents "hot spots" and sweat build-up that causes inaccuracies*

## UV and SPF

*UV and SPF sensing on the body to prevent sun damage*

## Gait & Weight Distribution

*Analysis of distribution of pressure, gait characteristics, and weight*

## EEG

*Monitoring and tracking of behavioral health, brain and nerve activity, and stress*

## EKG

*Diagnosis and monitoring of chronic conditions such as cardiac arrhythmias*

## Heart Rate

*Continuous monitoring of vital signs such as heart rate enables whole-health profiling, versus today's standard of sporadic sampling*

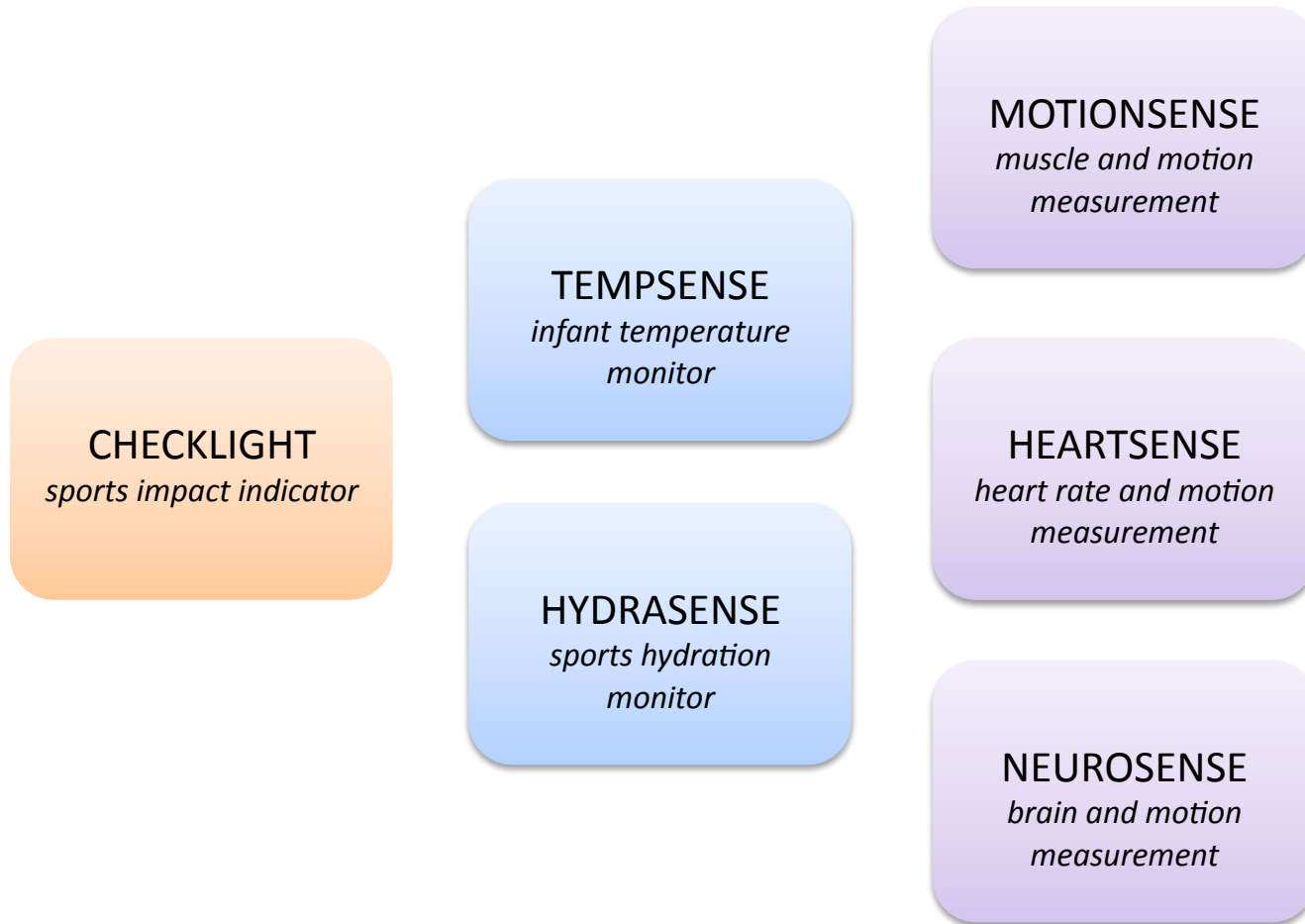
## EMG

*Capture of local muscle activation for rehabilitation, motion study, and tone assessment*

## Accelerometer & Gyroscope

*Superior mechanical coupling to the body, reduces motion artifacts that cause noise*

# PRODUCT roadmap





# Product programs



# Sports Impact Indicator

Breakthrough technology to maximize performance while minimizing risk of injury to athletes of all skill levels.

# CHECKLIGHT

Reebok - MC10





# TEMPSENSE

f e v e r

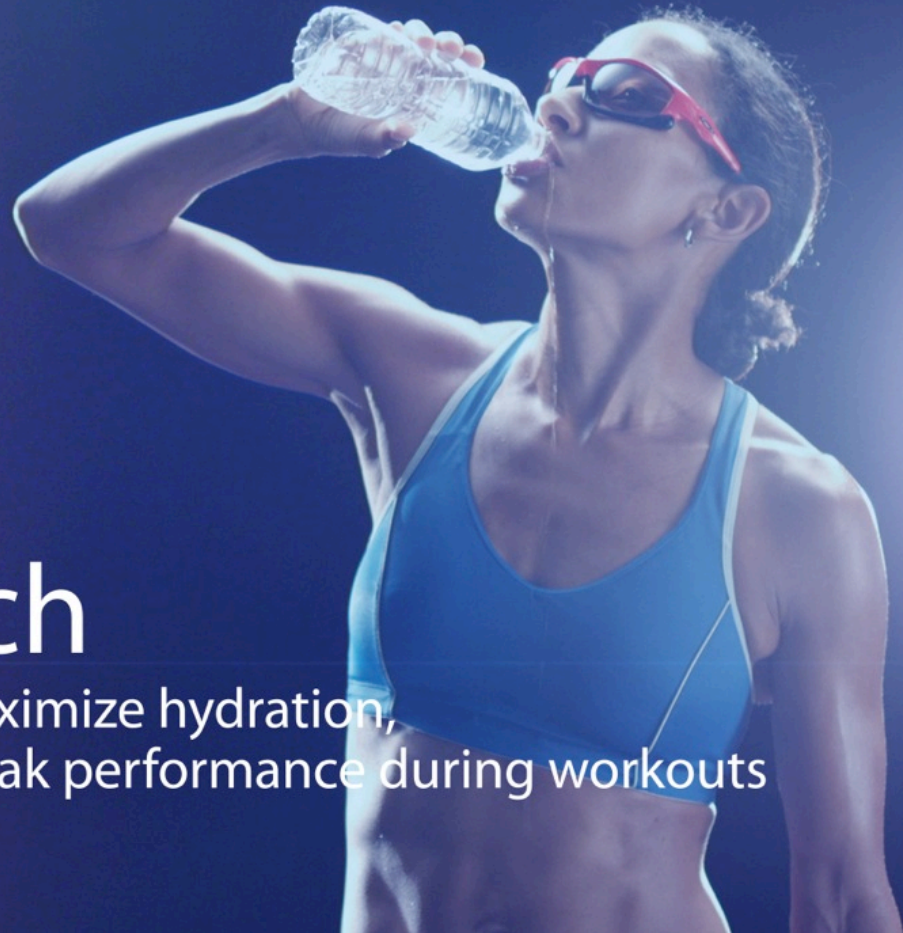


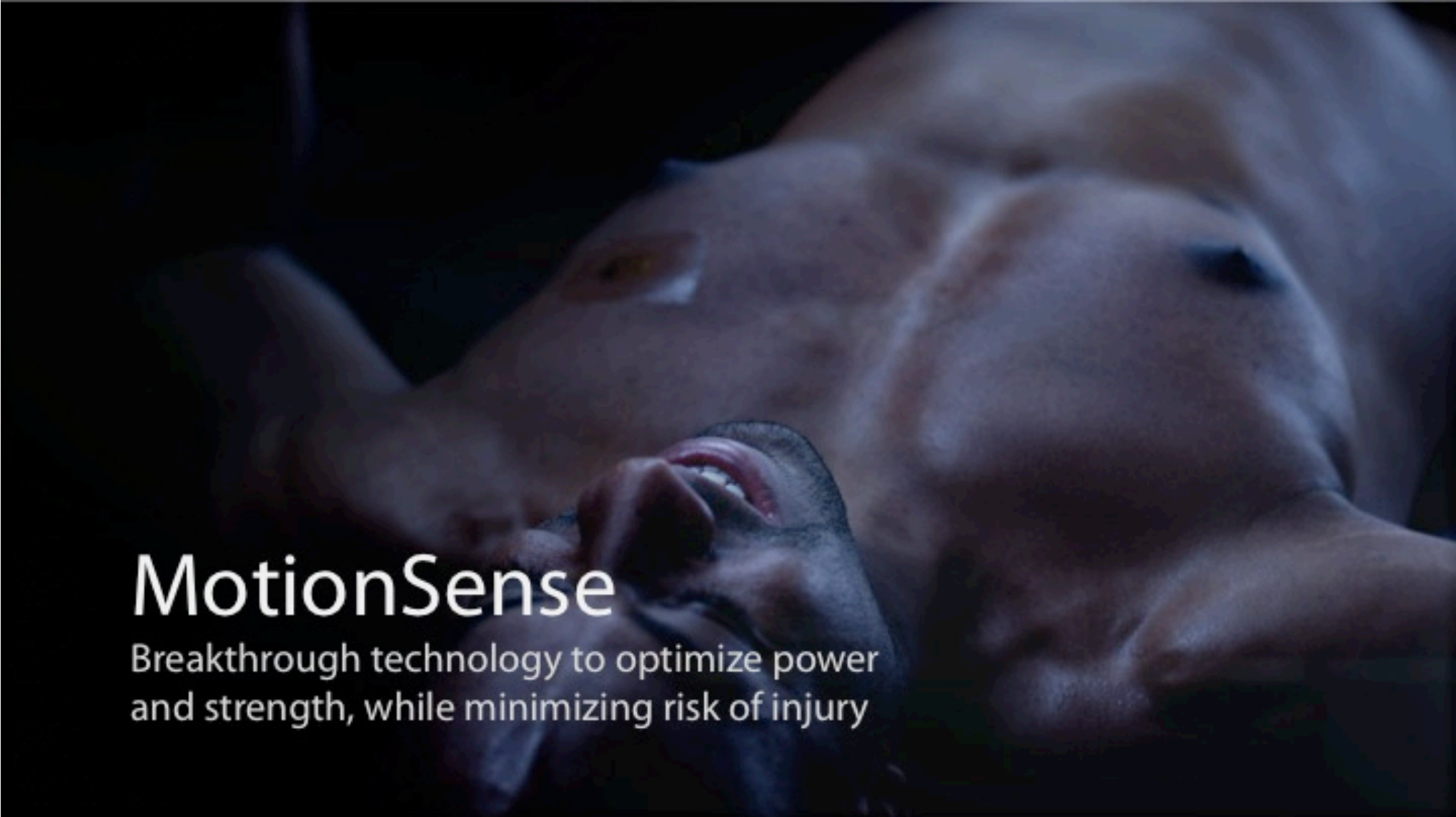
# TEMPSENSE m o n i t o r



# Hydration Patch

Breakthrough technology to maximize hydration, minimize fatigue, and deliver peak performance during workouts





# MotionSense

Breakthrough technology to optimize power  
and strength, while minimizing risk of injury



info@mc10inc.com



www.facebook.com/mc10inc



@mc10inc



www.youtube.com/mc10conformal

G E T I N  
t o u c h



Ben Schlatka  
VP Business Development

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MC10 extends human capabilities through virtually invisible and conformal electronics. We reshape rigid, high performance electronics into human compatible form factors that stretch, bend and twist seamlessly with the natural world. MC10 is headquartered in Cambridge, MA. Visit MC10 online at [www.mc10inc.com](http://www.mc10inc.com).

