Bioelectric Medicine Forum 2019, New York City
New Devices Up Our Sleeve: Neuromodulation Gets Personalized

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Disclosures: CUNY: Patents. Soterix Medical: Co-founder, Patents
Boston Scientific: Neuromodulation Scientific Advisory Board, Patents
GlaxoSmithKline (GSK) Life Science Scientific Advisory Board
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Personalized Therapy is Iterative

measurement → decision

decision ← measurement

Personalized Therapy is Iterative
Personalized Therapy

- Tunable efficacy
- Fast iterations
- Minimal risk

Drugs
Molecular

Implants
In-Hospital

Apps

Wearable
neuromodulation
Personalized Neuromodulation Therapy at Home
Personalized Neuromodulation Therapy at Home

Device
R_x + sensors

Stand-alone sensors

App Questions + Digital Therapy

Decision

Measure 3x
ElectraRx App

Adaptive questions optimized to select daily treatment (not track or diagnose)

- How are you?
- What kind of pain?
- What is bothering you?
- How’s work?

Option 1 Rx
Option 2 Rx
Responsive Measures for Personalized Neuromodulation

- Integrated: EEG, EOG, fNIRS, GVS
- Stand-alone sensors: PPG, ECG, Respiration, IMU, EDA, EMG
Neuromodulation
THE SCIENCE & NEW YORK CITY Neuromodulation

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