The Michael J. Fox Foundation: Research Update

Susanna Wach, Advancement Officer March 2, 2022



HERE. UNTIL PARKINSON'S ISN'T.

Our Mission

The Michael J. Fox Foundation is dedicated to finding a cure for Parkinson's disease through an aggressively funded research agenda and to ensuring the development of improved therapies for those living with Parkinson's today.

- » Founded in **2000** by Michael J. Fox
- » Team of 180+ based in New York City
- » More than 125,000 donors supporting our mission to speed a cure in 2021
- » More than \$1.5 billion in research programs » funded to date
- » 3,200+ projects by academics, biotechs, and pharma funded to date

- y 40% of funded projects are led by researchers outside of the United States
- » Over 400 researchers convened each year for workshops and meetings
- In 2020, community advocates contacted lawmakers 20,000+ times about critical Parkinson's issues



WHAT MAKES MJFF UNIQUE?

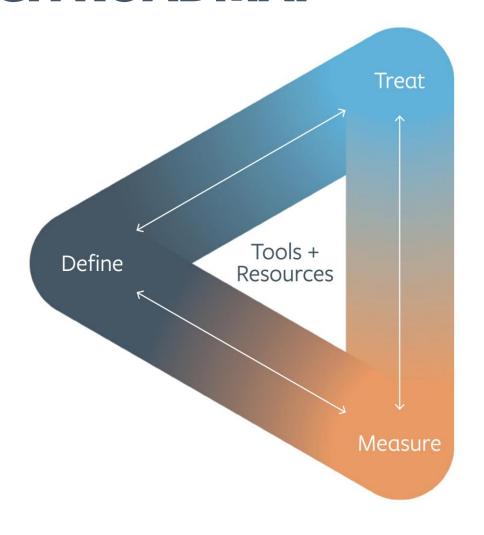
- » Needs of patients compel us to work urgently to fund most promising research
- » Deploy funding to research within months of receiving donations
- » Research team works to fund the most promising research in the most strategic way
 - 15PhDs, 1 MD (Movement Disorder Specialist), 12 business strategists
- » Grants are milestone driven with quarterly assessments
- » Grant-making process is structured to ensure collaboration



The Michael J. Fox Foundation has no endowment and 88¢ of every dollar spent goes directly to research.



OUR RESEARCH ROADMAP





MJFF PLAYS A VITAL ROLE IN DRIVING DRUG DEVELOPMENT



MJFF supports promising, early-stage projects through the development pipeline to help them build the data that will attract funders with resources and experience in later stages.





PARKINSON'S RESEARCH UPDATE

PRIORITY AREAS

SYMPTOMATIC Motor **Symptoms** Non-Motor **Symptoms Emerging Targets**

DISEASE MODIFYING LRRK2&GBA Alpha-synuclein **Emerging Targets**

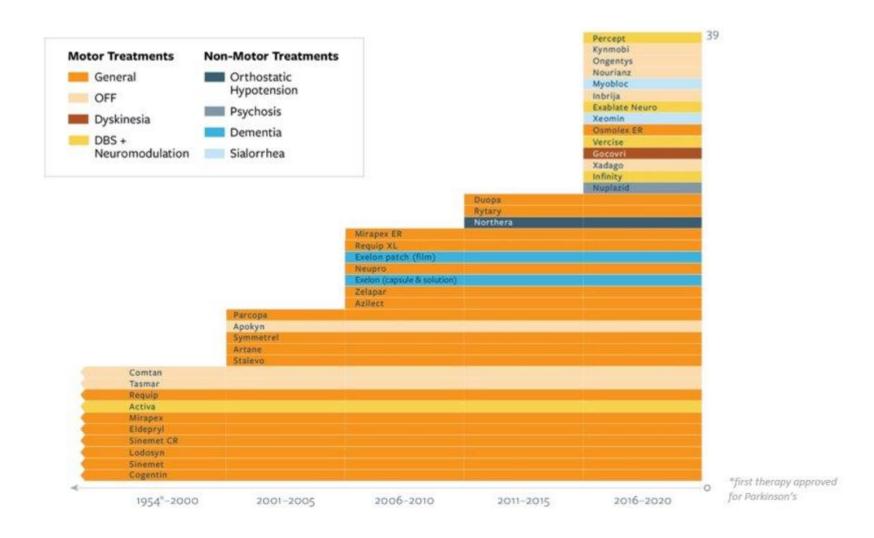
FIELD-WIDE CHALLENGES Biomarkers **Clinical Trial** Recruitment Research Tools

We prioritize and pursue research in these areas, providing financial and intellectual support for projects to ensure progress toward new therapies for people with PD



Approved Therapies

39
treatments for symptoms of Parkinson's





EXPLORING INNOVATIVE WAYS TO ADDRESS UNMET NEEDS



Vibrating socks



Waist-worn airbags

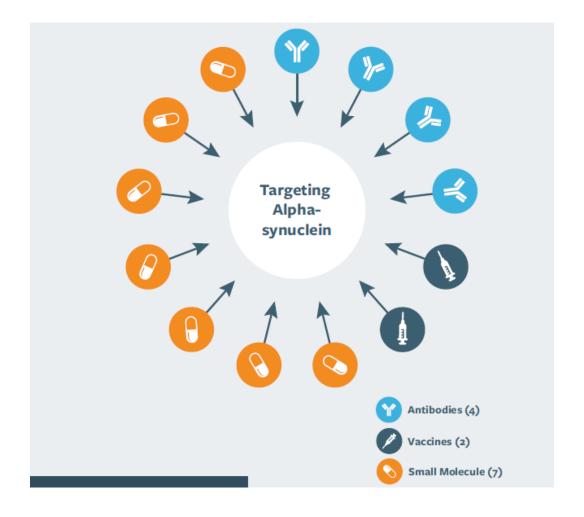


Assistive walking device



THERAPIES TO SLOW OR STOP PD: ALPHA-

SYNUCLEIN





THERAPIES TO SLOW OR STOP PD

Alpha-synuclein

- » Target protein that clumps in brain cells of everyone with PD—one of our most promising routes
- » 13 therapies across Phase I and II

GBA & LRRK2

- » Most common genetic links to Parkinson's are mutations in these genes
 - >> 4 therapies against GBA are in human trials—scientists investigating potential for treatments to benefit patients who do not carry the mutation
 - » 2 therapies targeting LRRK2 are in human clinical trials

Other Therapies

- » Initiatives testing therapies repurposed from other diseases
- » Other targets include studying inflammation, mitochondria, oxidative stress, and cell repair



GENETIC DISCOVERIES CAN POINT TO WIDESPREAD TREATMENTS

FIND GENE MUTATION

LINK GENE TO BIOLOGY

DEVELOP TREATMENTS

- Look for families with PD
- Examine large populations of people with and without PD

- How do mutations impact protein function?
- Do people without mutation have same dysfunction?
- Will therapy help the wider PD population?



WHAT WILL HELP US MOVE FASTER?

Biomarkers: biological characteristics that alert us to risk, onset, or progression of disease

A biomarker would help with:

- » Earlier diagnosis and therapeutic intervention
- » Charting disease progression
- » Designing clinical trials
- » Testing the impact of new therapies





PARKINSON'S PROGRESSION MARKERS INITIATIVE (PPMI)



Parkinson's Progression Markers Initiative

50International clinical sites

4,000+ Participants

8M+ data downloads





WHAT CAN YOU DO TODAY?

WHAT ELSE MAY HELP MANAGE SYMPTOMS?



Exercise

No "right" exercise for Parkinson's disease Some (yoga, tai chi, boxing) may help with flexibility

Work with a physical therapist to build a safe regimen



Diet

Healthy, balanced diet with antioxidants

Some adjustments may help with medication effect and with non-motor symptoms

Talk to your doctor before adding any supplements to your treatment regimen



Self Care Activities

Meditation can relieve stress

Getting involved in your community or with favorite hobbies or creative projects (art, reading)



Build a Care Team

Movement disorder specialist, physical therapist, occupational therapist, speech therapist, counselor, and nutritionist



JOIN FOX INSIGHT

Fox Insight was developed in response to fundamental challenges around recruiting & retaining participants in conventional clinical studies (e.g. geographic, mobility, transportation)

Volunteers Enrolled

51,678

Study Visits Completed

130,077+

Surveys Completed

1,244,147+



75% of Fox Insight participants have Parkinson's

25% of Fox Insight participants are control volunteers

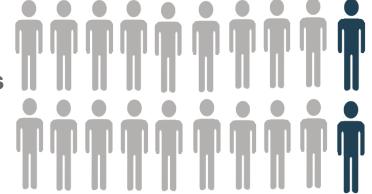
Foxinsight.michaeljfox.org



PARTICIPATE IN CLINICAL TRIALS

THOUGH 88%

of people with Parkinson's say they would be willing to participate in a trial



FEWER
THAN 25%
ever do

Fox Trial Finder was created to help increase the flow of willing participants into the clinical trials that need them, accelerating the Parkinson's drug development process.



foxtrialfinder.michaeljfox.org



JOIN OUR COMMUNITY

Visit www.michaeljfox.org for the latest on Parkinson's research and care



Webinars: Live panel discussions monthly; available on-demand



Podcasts: Expert interviews on life with Parkinson's and the latest science



Ask the MD: Blogs and videos on Parkinson's research and care by a movement disorder specialist



Team Fox: Join grassroots fundraising efforts **teamfox.org**



Policy: Advocate for Parkinson's Policies michaeljfox.org/congress



Buddy Network: Join the Parkinson's Buddy Network to connect with new friends, share tips and build relationships. parkinsonsbuddynetwork.org



PARKINSON'S IQ + YOU BAY AREA

The Michael J. Fox Foundation presents

Parkinson's IQ+YOU

Education for Empowerment

Oakland Marriott City Center – December 3, 2022





QUESTIONS?