

# SRNA Progress Grant

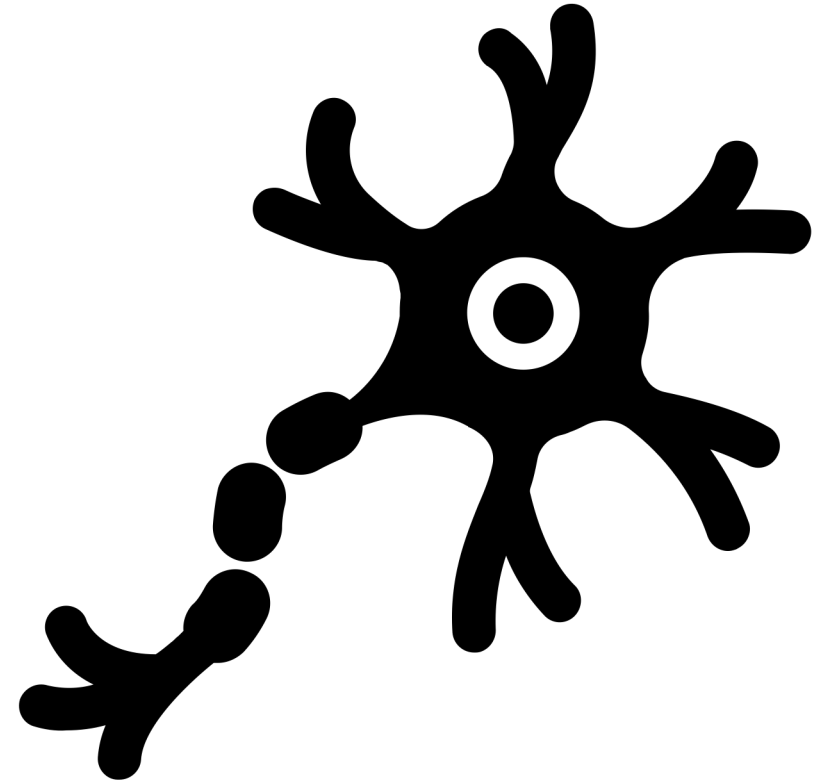
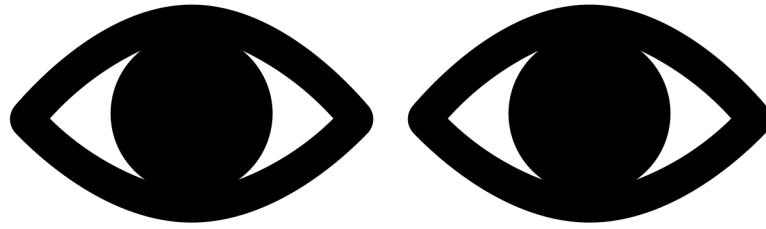
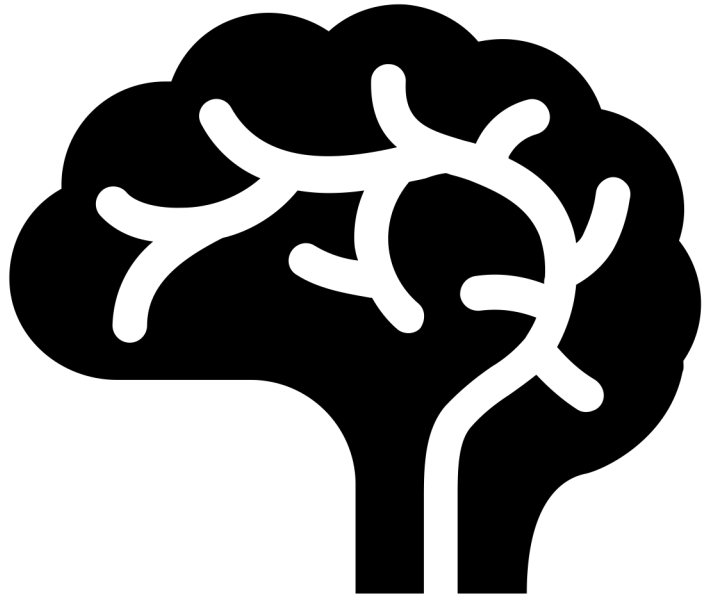
Assessing the impact of social determinants of health on access to care and disability in NMOSD patients

10/10/2021

# Social Determinants of Health (SDOH)

## Social Determinants of Health





NMOSD

Why should we  
look at social  
determinants of  
health in NMOSD?

- Prevalence of NMOSD is higher in non-white populations compared to white populations
- Race has been associated with younger age at onset and more severe attack at onset, as well as hospital stays.

# How do we assess SDOH?

- **Physical/Environmental** – zip code, city/state
- **Social** – gender, race, ethnicity, immigration status
- **Economic**- insurance status, employment level, education level, income
- **Behavioral**- smoking
- **Clinical** – Age, BMI, medical comorbidities

How might  
SDOH affect  
patients with  
NMSOD?

Access to Care

Disability

How do we  
assess these  
measures?

### **Access to Care**

- Time from first symptom to diagnosis,
- Time to first disease modifying therapy initiation

### **Disability**

- Patient Reported Outcomes- ambulation status, activities of daily living
- Physician reported Outcomes- ambulation status
- EDSS (Disability Scale), Timed 25-foot walk
- Visual examination- visual acuity

How might we  
answer the  
question?

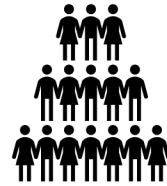
Data that was collected prospectively



Data that we can collect retrospectively



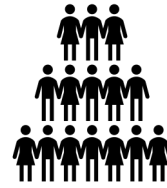




CIRCLES

**CIRCLES= Collaborative International  
Research and Longitudinal experience  
study**

- **Run by the Guthy Jackson Foundation  
for NMO**
- **Existing data with NMOSD patients  
collected prospectively**



## CIRCLES

- **Physical/Environmental** – zip code, city/state
- **Social** – gender, race, ethnicity, immigration status
- **Behavioral**- smoking
- **Economic**- insurance status, employment level, education level, income
- **Clinical** – Age, BMI, medical comorbidities



# CIRCLES

## Access to Care

- Time from first symptom to diagnosis,
- Time to first disease modifying therapy initiation
- Type of disease modifying therapy initiation

## Disability

- Patient Reported Outcomes- ambulation status, activities of daily living
- Physician reported Outcomes- ambulation status
- EDSS (disability scale), Timed 25-foot walk
- Visual examination- visual acuity

## Multi-Center Study

- Retrospective study
- 3 large academic medical centers



## Multi-Center Study

- **Physical/Environmental** – zip code, city/state
- **Social** – gender, race, ethnicity, immigration status
- **Behavioral-** substance uses
- **Economic-** insurance status, employment level, education level, income
- **Clinical** – Age, BMI, medical comorbidities





## Multi-Center Study

### Access to Care

- Time from first symptom to diagnosis,
- Time to first disease modifying therapy initiation
- Type of disease modifying therapy initiation

### Disability at Onset

- Patient Reported Outcomes- ambulation status, activities of daily living
- Physician reported Outcomes- ambulation status
- EDSS, Timed 25-foot walk
- Visual examination- visual acuity

How might SDOH  
affect patients  
with NMSOD?

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# Access to Care

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# Disability

# Acknowledgements

- **Research Mentors: Dr. Katz Sand (Mount Sinai), Dr. Amezcua (USC), Dr. Levy (MGH)**
- **Guthy Jackson Foundation**
- **SRNA**