# ACT MS Cohort & Fatigue sub-study

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#### MS Research Team













#### **ACT MS Cohort Study**

- Longitudinal study involving adults living with and without MS
- Annual assessments to monitor changes in health and wellbeing over time
- Better understand how personal, environmental, and psychological factors affect the health and wellbeing of people living with MS

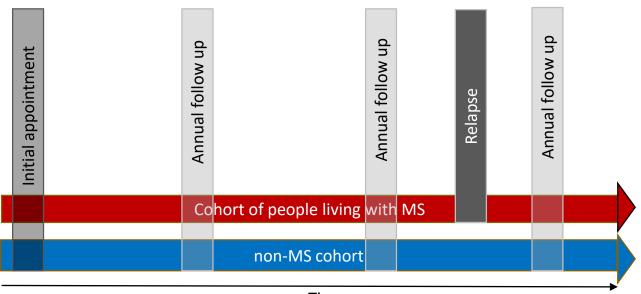


#### ACT MS Cohort Study: What's involved?

- Online questionnaires
  - Demographics, health and medical information
- Blood samples
- Measures
  - Expanded Disability Status Scale (ED\$S)
  - Height and weight



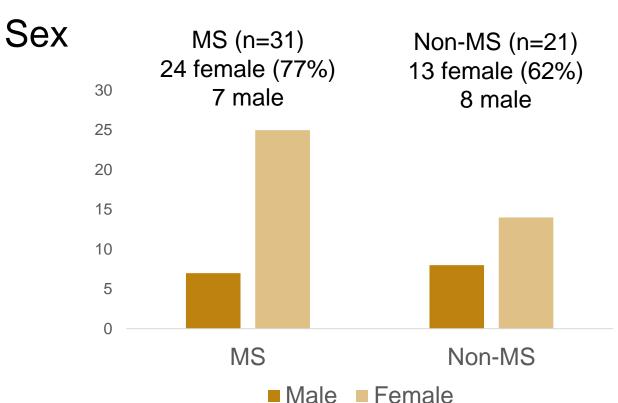
## **ACT MS Cohort Study**



Time

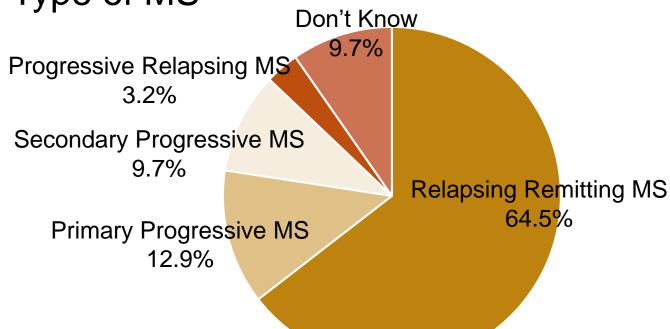


# **ACT MS Cohort Study Participants**





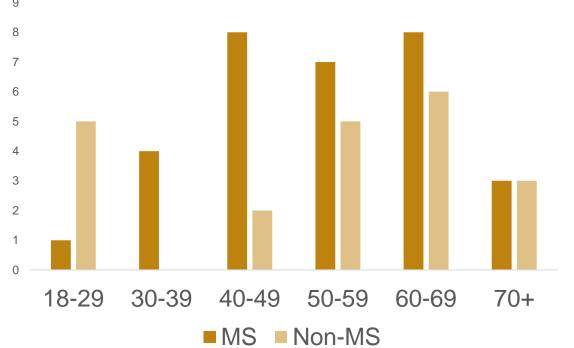
# ACT MS Cohort Study Participants Type of MS





# ACT MS Cohort Study Participants

Age





#### Moving forward

- Commencing our first annual reviews
- Recruiting more participants
- Collaborations





### Fatigue in MS

- Overwhelming sense of tiredness
- Most common and disabling symptom of MS
- Reported in all stages and types of MS
- Can be a feature of MS prodrome
- Has cognitive, emotional and physical components
- Impairs quality of life



"Persistent mental and physical fatigue has robbed me of the ability to do many of the things I used to enjoy, including work. Simple activities such as reading a book can be difficult, as I forget what I've just read and need to re-read it."

"The fatigue from MS has really slowed me down.
I can't plan what I will do for the day, and don't have the mental energy to follow things through."



"On the rare days I do have energy and clarity of thought, I realise what I have lost."

## Fatigue in MS

#### Primary MS fatigue

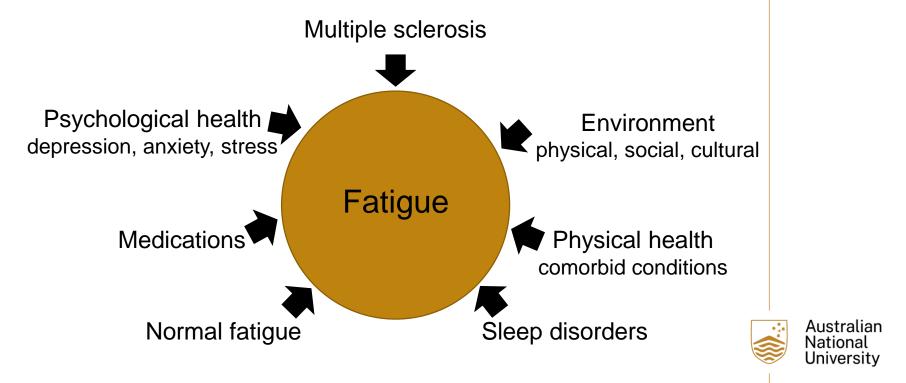
 Inflammatory/Neurodegenerative processes/impaired nerve condition

#### Secondary sources

 Sleep disturbance, medication side effects, other medical conditions, depression, pain, MS symptoms (muscle spasticity, bladder issues etc.)



#### Causes of fatigue



CMSC NeurologyLive MS Series Session 4

## Fatigue sub-study: Aims

- Understand more about the mechanisms of MS-related fatigue.
- Identify and examine possible biomarkers and track changes in MS-related fatigue.
- Investigate how MS-related fatigue and its biomarkers affect the health and wellbeing of people with MS (both with and without selfreported fatigue), and compare those factors for people who do not have MS.



#### Fatigue sub-study: Participants

- Participating in ACT MS Cohort Study
- 18 years or older
- With any type of MS (with or without self-reported fatigue)
- Without MS who are similar sex and age as participants living with MS in this study

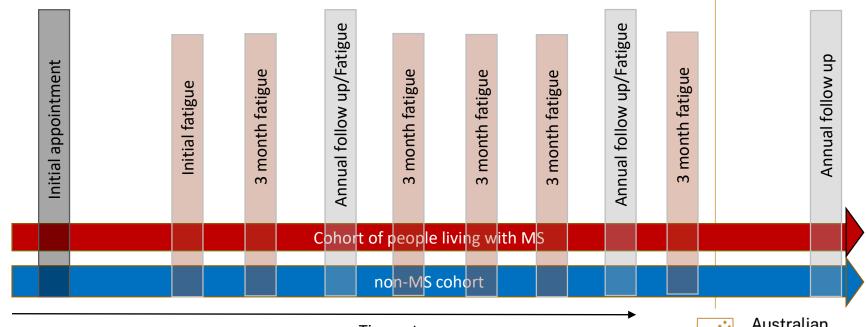


## Fatigue sub-study: Study design

- Commence in 2022
- Visit the JCSMR every three months (8 visits over 2 years; people with MS may be asked to attend ANU if a relapse occurs between sessions)
- 90 minutes per session
- Transport to/from ANU provided



#### ACT MS Cohort Study: Fatigue sub-study





#### Fatigue sub-study: What's involved

- Online questionnaires
  - Digital technologies, fatigue, mood, sleep
- Blood samples
- Measures
  - Cognitive tests
  - Vision assessment
  - Physical tests (hand and finger function, walking ability, balance)



#### Why is this research important?

#### We want to:

- Transform healthcare by developing new personalised health technologies and solutions in collaboration with people living with MS, clinicians and health care providers
- Improve the quality of life for people living with MS

https://www.anu.edu.au/research/research-initiatives/our-health-in-our-hands



#### Find out more

About this MS study or others:

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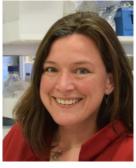




# Thank you

- Our participants
- Researchers across OHIOH and collaborators











Australian National University

#### Thank you

- For your participation
- To all the facilitators
- To all the speakers
- To the organising committee
- Tobias James and Calo Huang









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