# The Dunedin Longitudinal Study

Dunedin .

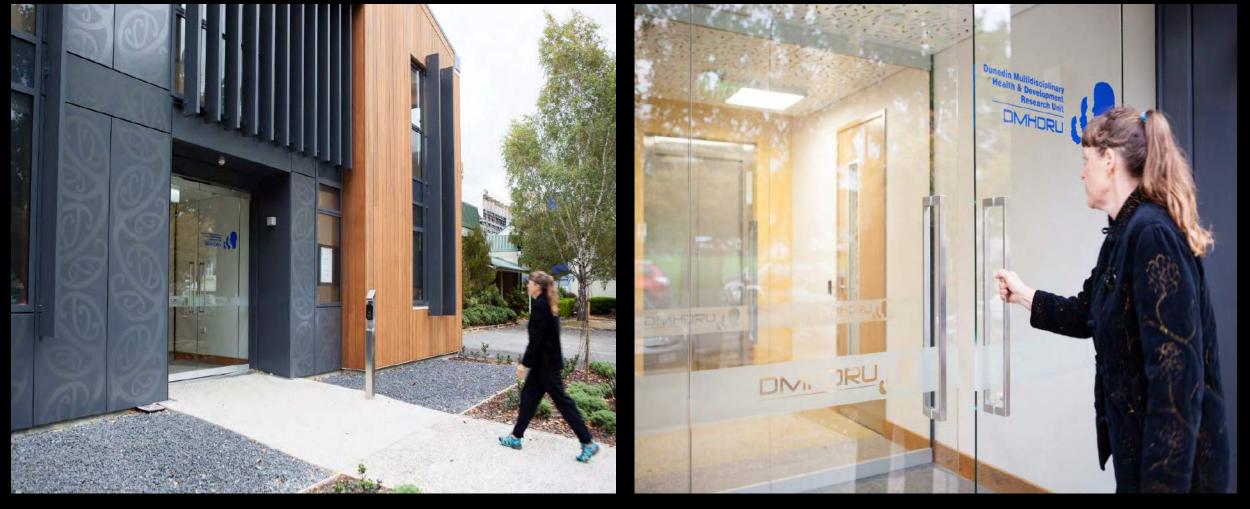
## Dunedin, New Zealand



# Dunedin Study Unit



### 8:10am: Study members arrive at the Unit



## Study members' lounge



## Informed consent





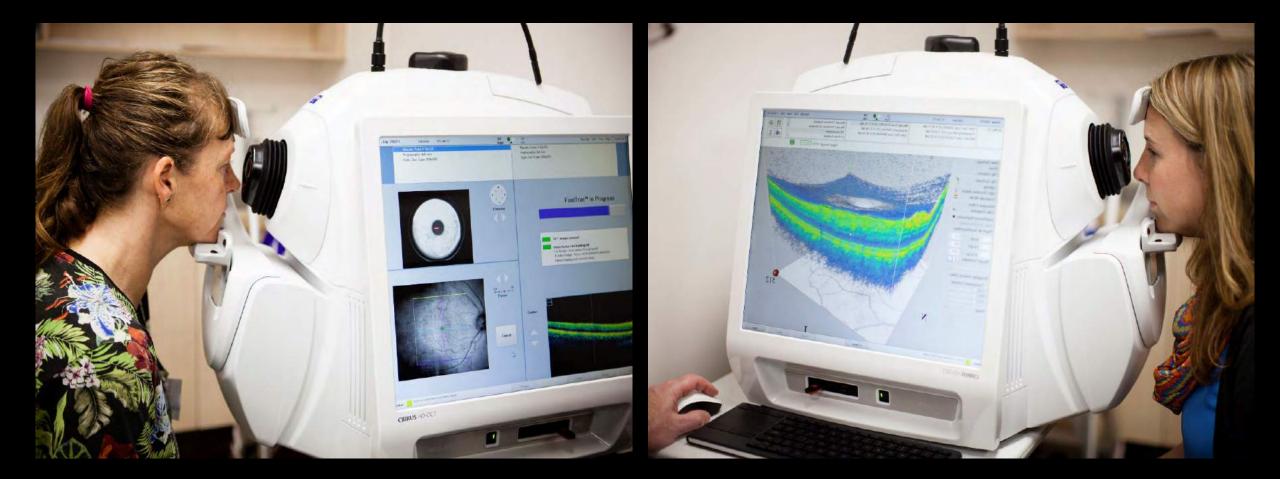
## 8:30 Vision testing: Acuity, contrast perception....



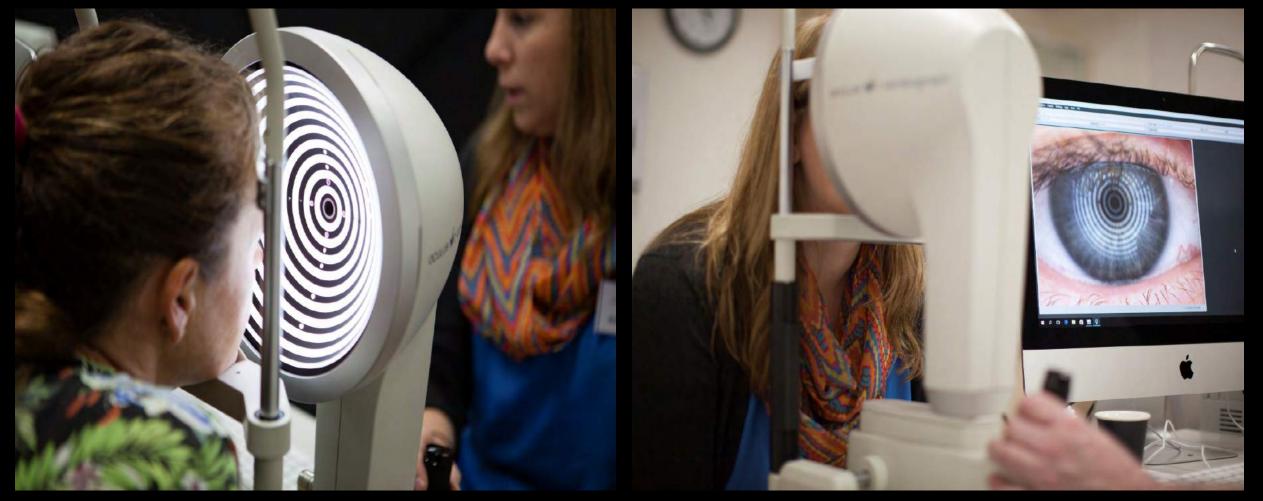
## Peripheral visual field testing



## Optical nerve scan



## Video of the eye's moving lipid layer



## Glands in the eye lid



## Digital Retinal Imaging



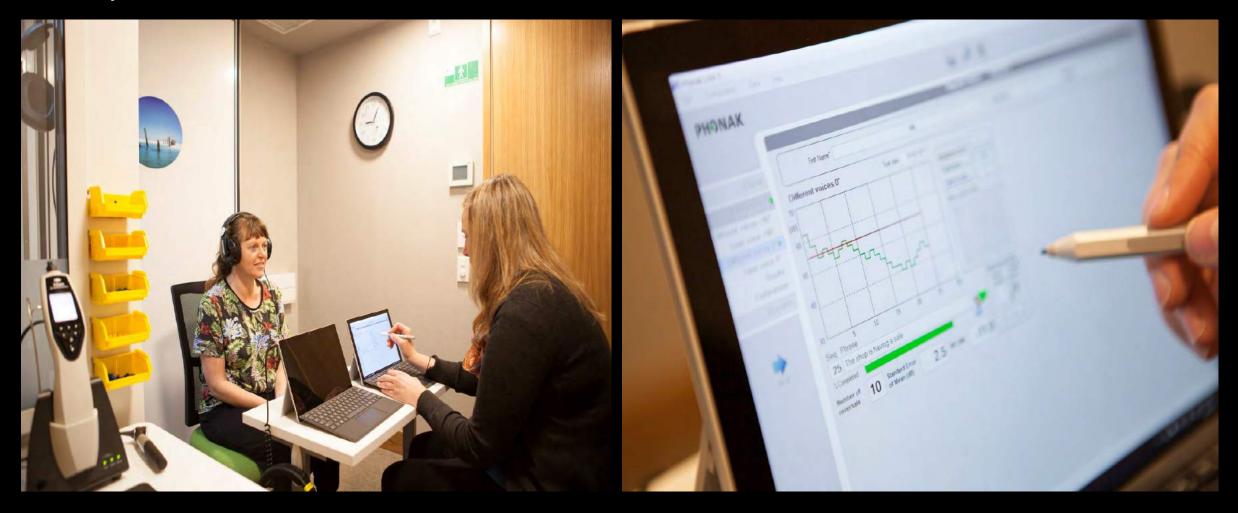
# 3-D Facial photography



## Audiology and hearing tests



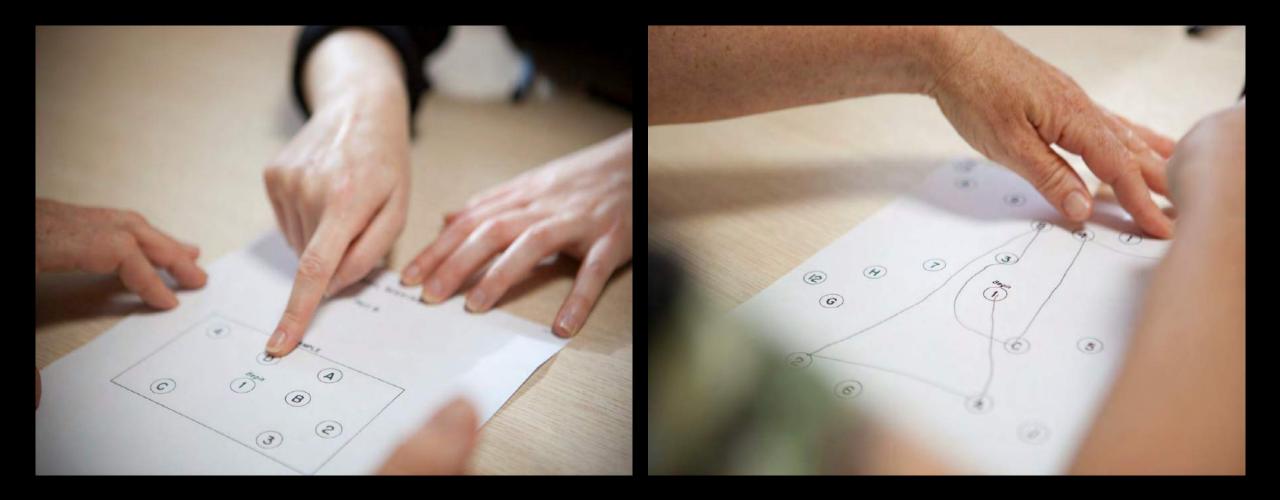
# Speech-in-noise test



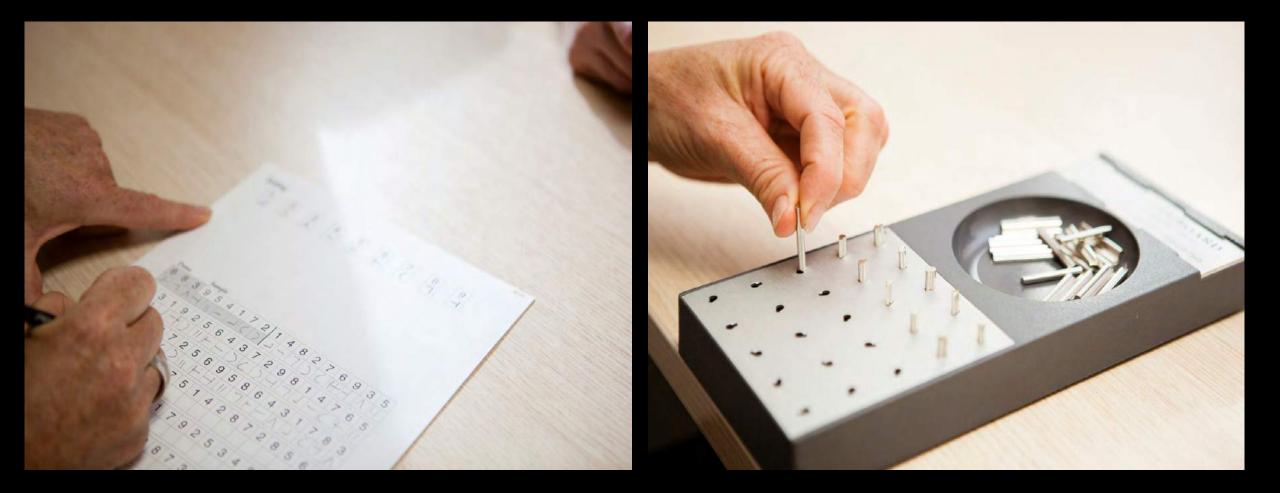
## 9:25 WAIS-4 IQ testing



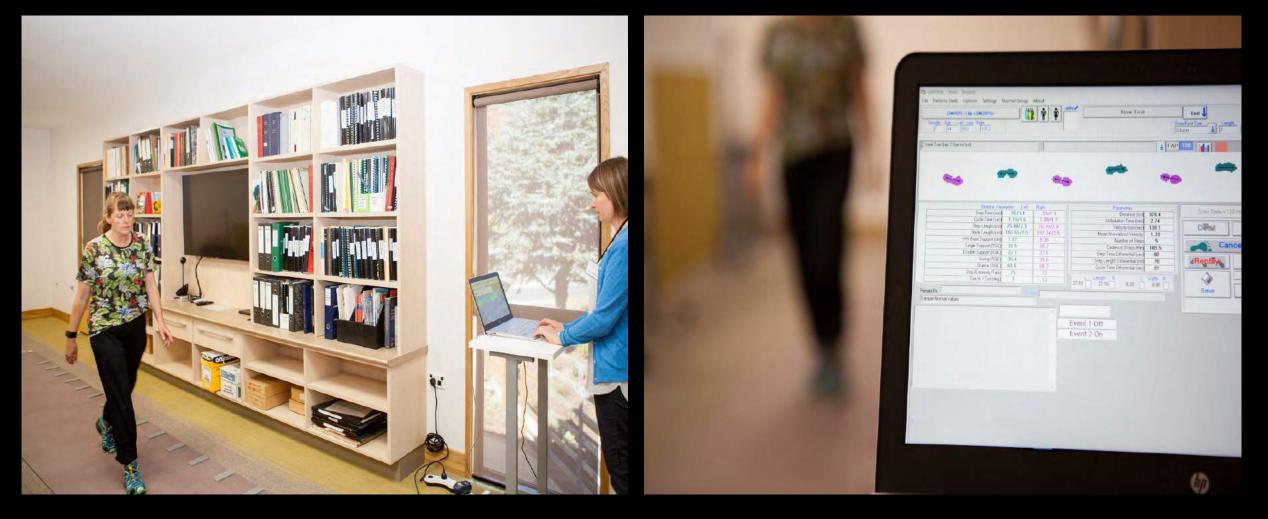
## Neuropsychological testing



# Neuropsychological testing



### 10:35 Gaitrite walking tests



## Anthropometry: Height & weight, etc.

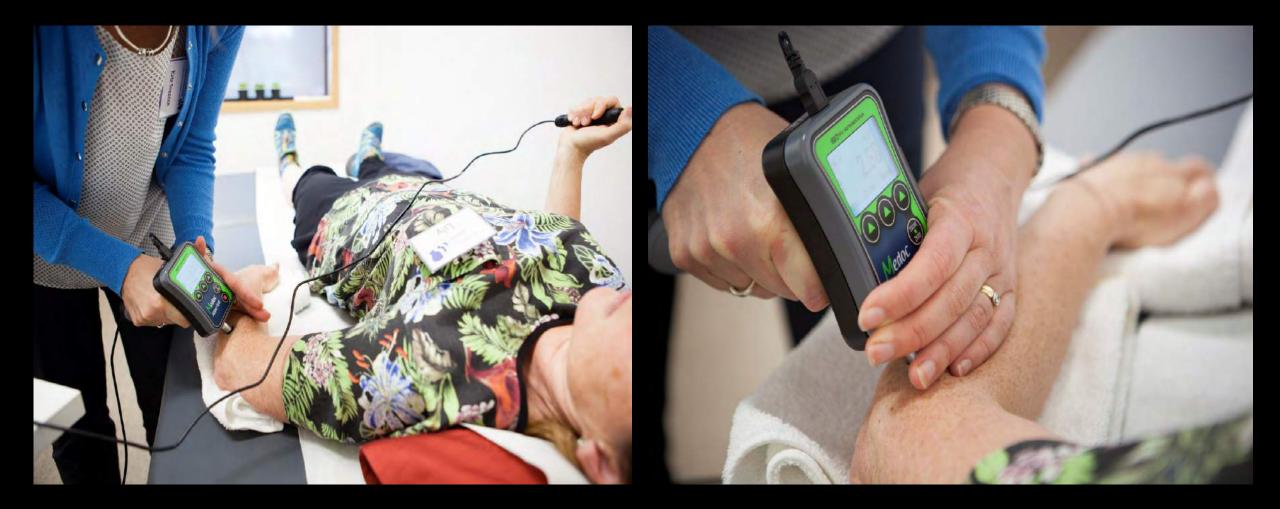




#### Blood pressure (+ medical and health interviews)



## Pressure pain threshold



#### Heightened pain sensitivity



# 11:30 Postural hypotension



#### Respiratory assessment



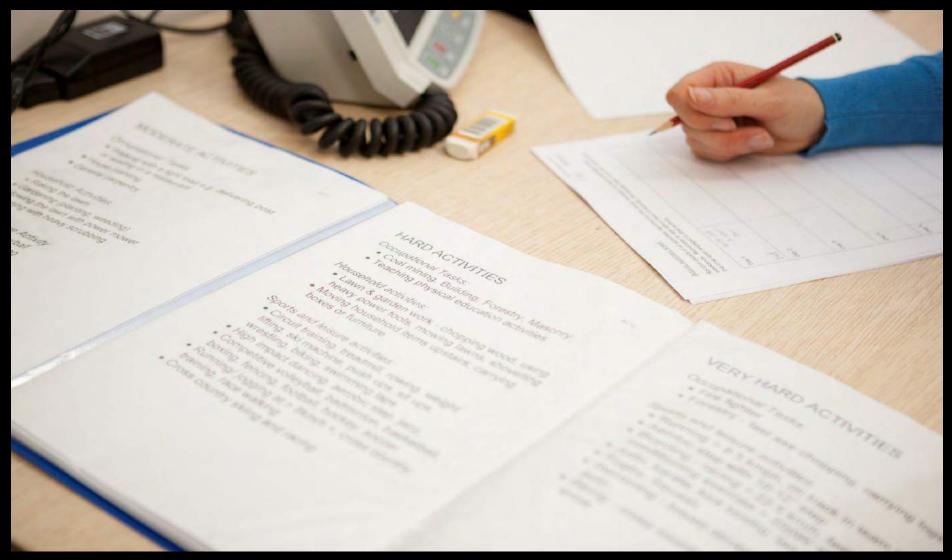
## Plethysmograph testing of lung function



## Cardio-respiratory fitness



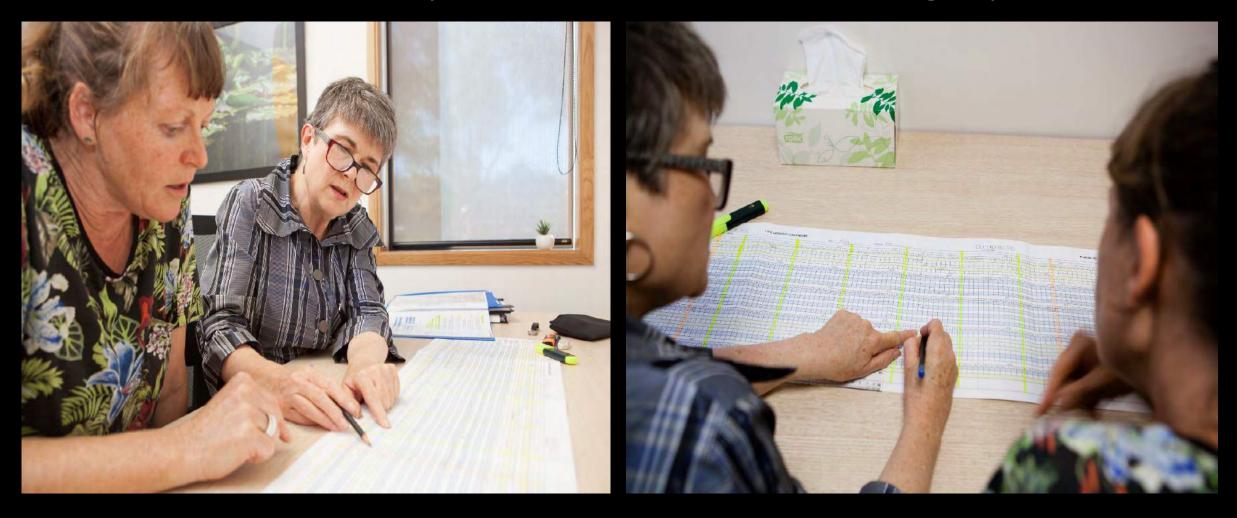
## Physical-activity interview (+ diet, sleep, etc)



## 12:25 Lunch



#### 12:55 Life-history calendar, social demographics



2:45pm Clinical interview series: Mental health, illegal behavior, substance abuse, finances, work, relationships, lifestyles



#### Physical function: 30-seconds chair-stands



## Physical function: one-leg balance



#### Physical function: 2-minute step-in-place



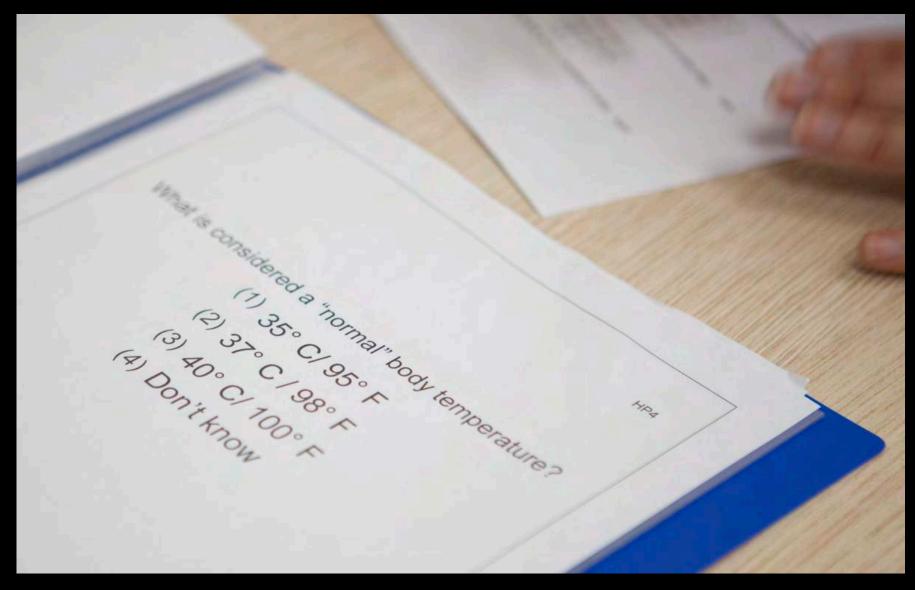
#### Physical function: Grip strength



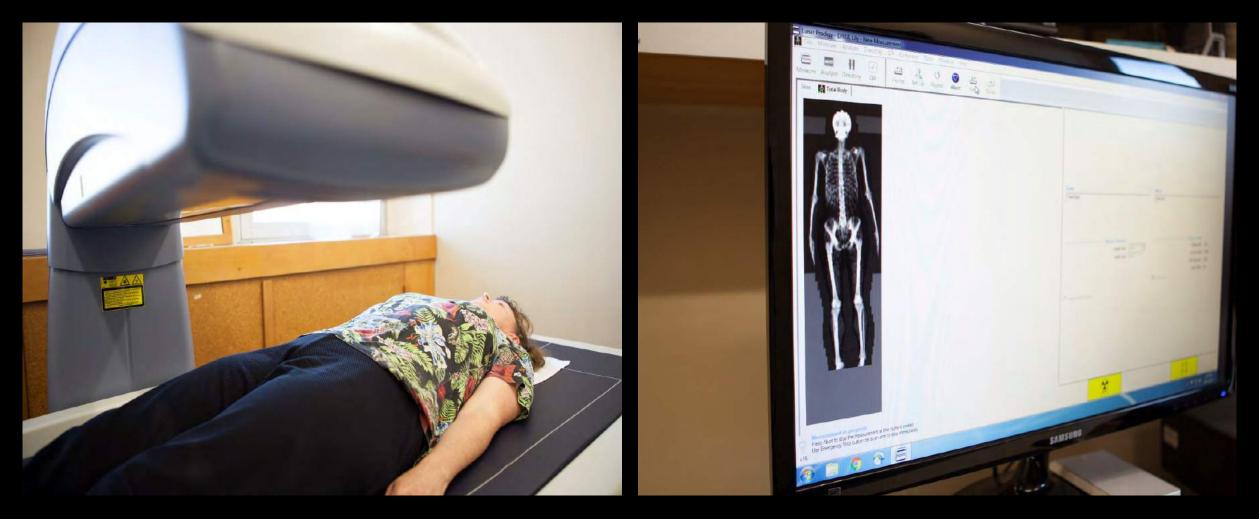
# Sexual & reproductive health



# Health knowledge and financial knowledge



# 4:30pm Bone-density (DEXA) scan



# 5:00 pm Dental exam



# Dental imaging



# Dental imaging















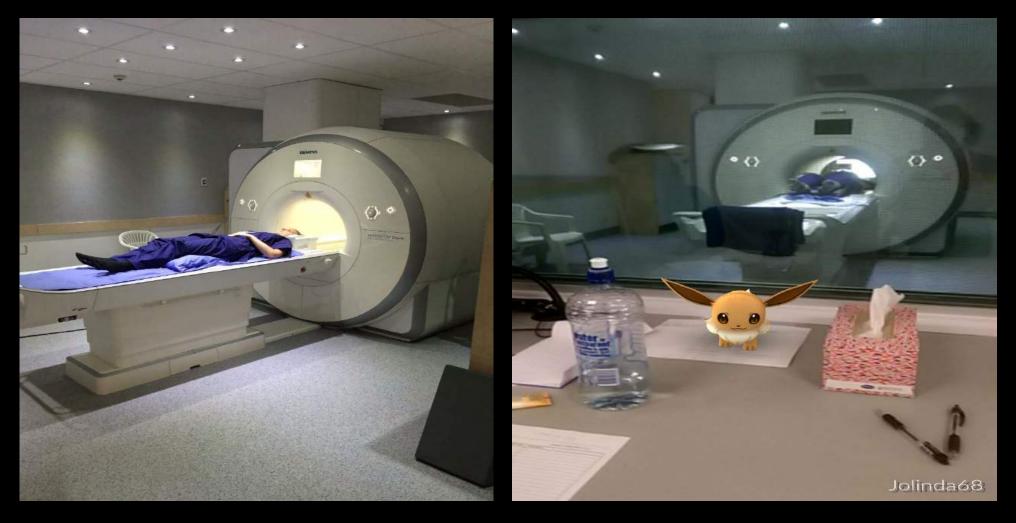
# 5:30pm: Blood draw



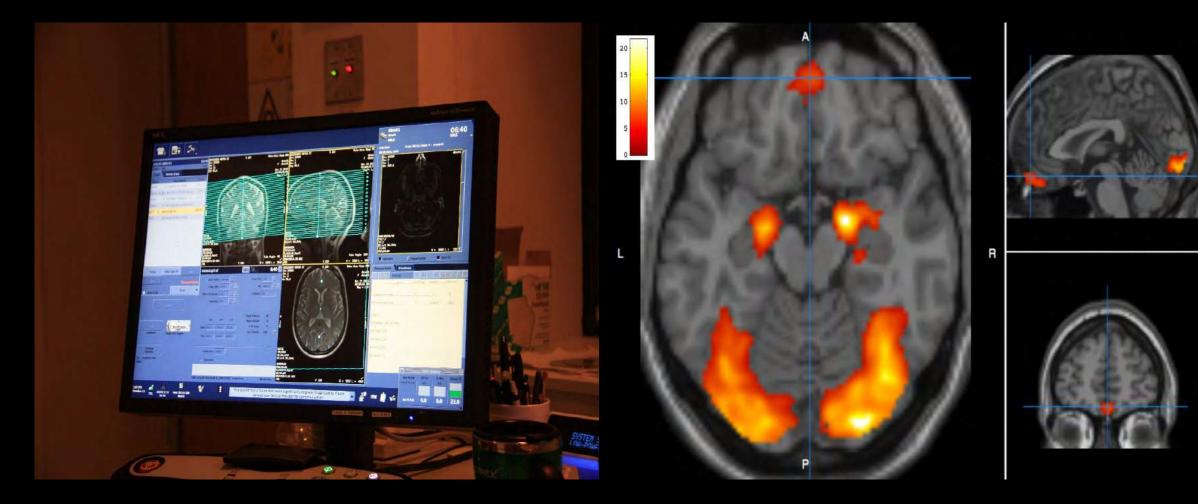
# Laboratory biomarker assays



# MRI brain imaging (next day)



# Brain imaging: Structural & functional



#### MRI SUB-STUDY TEAM

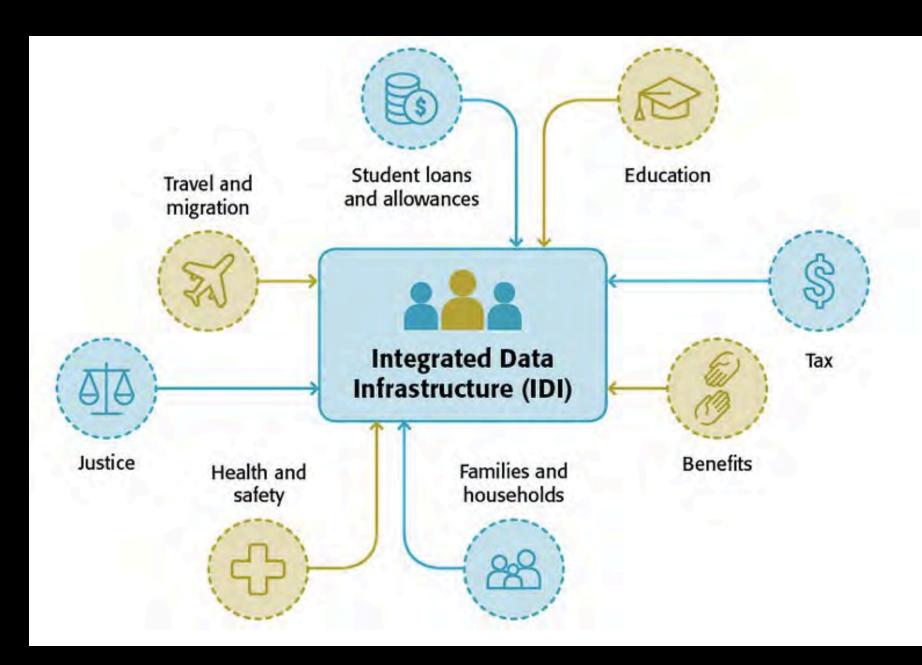
#### Dr. Dave Ireland Prof Ahmad Hariri Annchen Knodt







New Zealand's Administrative record data

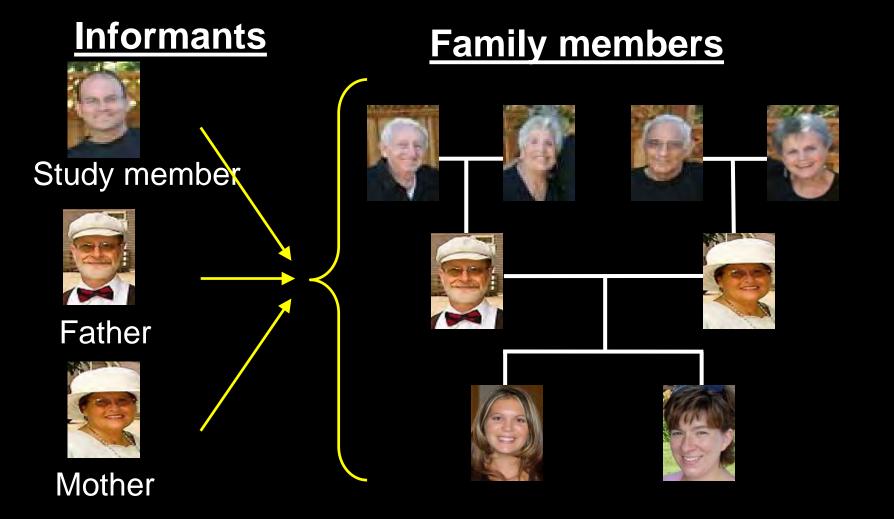


# Dunedin Study participation rates

Age	Year	Number	Percent*
Birth	1972-73		
3	1975-76	1037	100%
5	1977-78	991	96
7	1979-80	954	92
9	1981-82	955	92
11	1983-84	925	90
13	1985-86	850	82
15	1987-88	976	95
18	1990-91	993	97
21	1993-94	992	97
26	1998-99	980	96
32	2004-05	972	96
38	2010-12	961	95
45	2017-2018	??	??%

\* Percent assessed, of those who were alive at each age.

### **Dunedin Family Health History Study:**



7-16 members per each of 1000 families, > 8,000 individuals

#### **Director Richie Poulton**



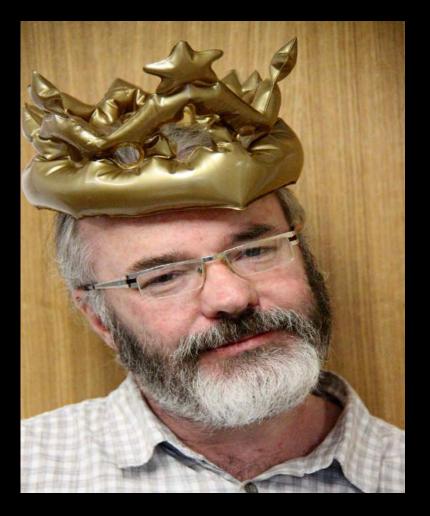
#### Assoc. Director Temi Moffitt



## Dunedin Study Phase-45 team



#### Assessment Manager Sean Hogan



#### Data manager Antony Ambler



#### Research Manager Sandhya Ramrakha



#### Senior Research Fellow Barry Milne



#### Administration Jenny MacArthur



#### Study-Member Logistics Jen Knox



## Duke University team for the Dunedin Study



# Susan Harward: Grants Administrator for Duke-Dunedin subcontracts



Data and Bio-Lab Staff for the Dunedin Study at Duke University:

Honalee Harrington Renate Houts Prof Avshalom Caspi Ben Williams Karen Sugden









# Andrea Danese, MD, PhD, King's College London





















Health Research Council of New Zealand

+ Private charities and foundations