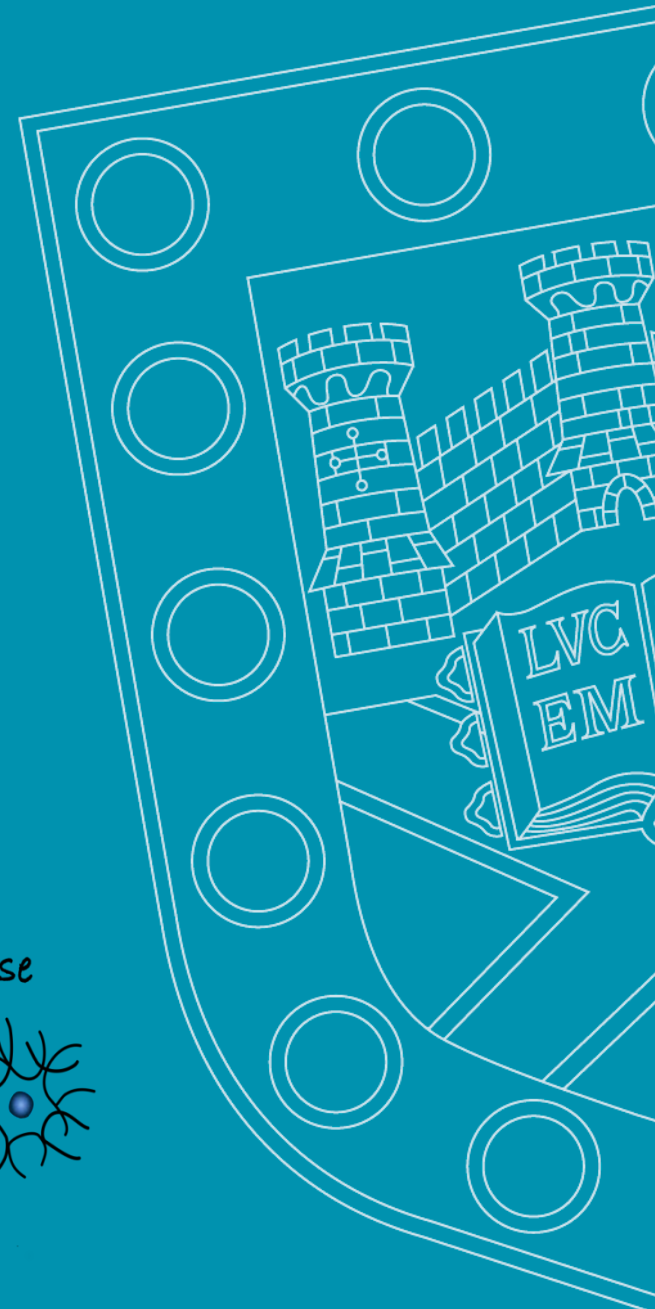
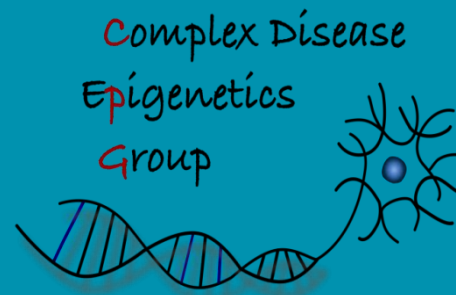


Genetics of Neuropsychiatric Symptoms in Dementia: novel opportunities for care home research

Byron Creese, PhD
B.Creese@Exeter.ac.uk

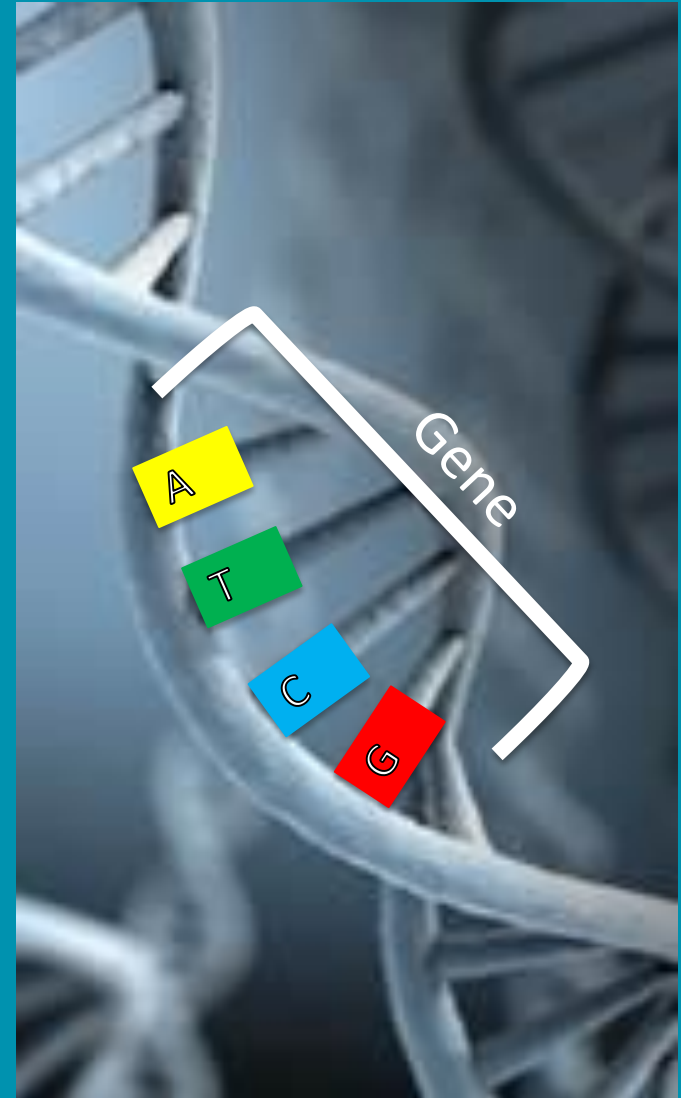


• Why neuropsychiatric symptoms?

- They are common: almost everyone will experience one symptom during the course of their illness
- They are associated with a poor prognosis: in many cases more rapid cognitive decline and a lower overall quality of life
- They are associated with a shorter time to nursing home care, which represents a major economic cost
- And we do not currently have very many effective treatments

Quick introduction to genetics

- A blueprint for everything about a person
- Our DNA sequence is like the words of a recipe
- DNA is grouped into chunks called genes
 - 'Gene' for hair colour
 - 'Gene' for eye colour etc. etc.
- You have two copies of each gene
- Almost every cell in your body contains two copies every gene



DNA Collection – it's easy!

- Technology today means that we can get DNA from saliva or cheek swabs. We don't need blood



- Taking samples in this way takes just a few minutes and can be done by us, care home staff, relatives or the resident themselves

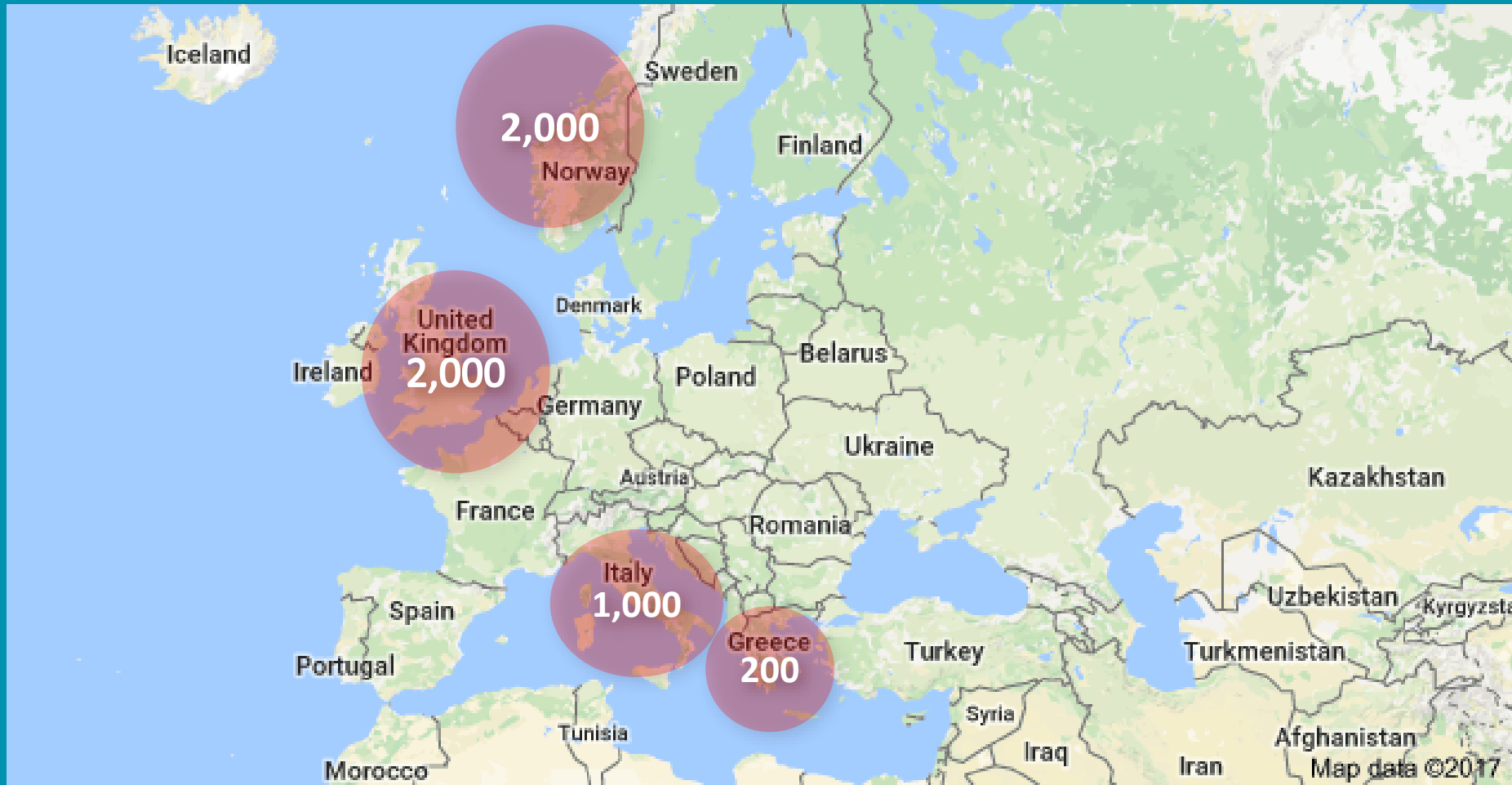
Norwegian and Exeter University Collaboration for the Genetics of Neuropsychiatric Symptoms in Dementia (NEXGENS)

- Long-standing need for AD cases well characterised for NPS
- Bring together samples from existing cohorts with the specific aim of studying genetics of NPS
- Largely from Norway and UK but also have collaborators in Italy and Greece
- So far ~5,000 and procedures in place to grow to >6,500 over the next couple of years

Why in care homes?

- Neuropsychiatric symptoms are especially common in people with more severe dementia
- We can draw on the expertise of carers and nurses who know people well and spend every day with them
- People in nursing homes are a geographically stable population

Today...



Genetic overlap between AD psychosis and schizophrenia

- People with schizophrenia experience paranoid thoughts, as do some people with Alzheimer's disease (although different in nature)
- Antipsychotics are used to treat schizophrenia and also psychosis in AD
- But is there biological overlap between the two?

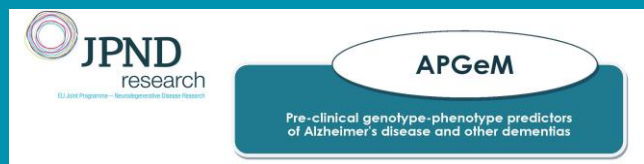
Summary

- There is a vitally important need for us to better understand the biology of neuropsychiatric symptoms
- Genetic studies are a great way to do this but we need many, many thousands of samples
- Nursing homes are a great environment to do this

Exeter....



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