Towards making Ireland the best place in the world to grow old

TILDA
The Irish Longitudinal Study on Ageing

MRI Study

www.tilda.ie
• Conducted in 2014-2015 (Wave 3)
• Random recruitment Health Centre attendees
• Targeted over 65 initially, recruited 50-64 to increase numbers
• 7 scan protocol developed with collaborators at Cardiff University
• Scan time 45 minutes, 1 hour total visit
<table>
<thead>
<tr>
<th>Age</th>
<th>No. of Scans</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-64</td>
<td>127</td>
</tr>
<tr>
<td>65-74</td>
<td>315</td>
</tr>
<tr>
<td>75+</td>
<td>115</td>
</tr>
<tr>
<td>Total</td>
<td>558</td>
</tr>
</tbody>
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7 Scan Protocol

- **T2w FLAIR**: Identify incidental findings (e.g., lesions)
- **T1w**: Measure brain structure (e.g., volume, thickness)
- **DTI DWI**: Assess white matter microstructure; Reconstruct architecture using fiber tractography
- **rs-fMRI**: Assess connectivity within distinct functional networks in the brain
- **pCASL**: Assess perfusion across the brain, providing an indication of cerebrovascular health