**Simons Searchlight Registry Update 16p11.2 Duplication**

*September 2021*

**Ages in Years**

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>12</td>
</tr>
<tr>
<td>5-9</td>
<td>18</td>
</tr>
<tr>
<td>10-14</td>
<td>24</td>
</tr>
<tr>
<td>15-19</td>
<td>9</td>
</tr>
<tr>
<td>20-24</td>
<td>5</td>
</tr>
<tr>
<td>25+</td>
<td>25</td>
</tr>
</tbody>
</table>

**Developmental & Behavioral Diagnoses**

- **Intellectual Disability/Development Delay**: 40
- **Language Impairment**: 35
- **ADHD**: 43
- **Autism**: 30
- **OCD**: 6
- **Anxiety**: 31

**Neurological Problems**

- **Low Muscle Tone**: 29
- **Clumsy**: 9
- **High Muscle Tone**: 4
- **Large Head Size**: 19
- **Small Head Size**: 16
- **Movement Disorder**: 7
- **Tic Disorder**: 14
- **Seizures**: 14

**Gastrointestinal Problems**

- **GERD**: 34
- **Diarrhea**: 15
- **Constipation**: 11
- **Inflammatory Bowel Syndrome**: 2
- **Gastric Ulcer**: 9
- **Other**: 9

**Notes:**
- Graphs show counts of individuals in each category. Individual participants may appear in more than one category if they report multiple conditions.
- Information on reported seizure types is included on the 2021 quarter 1 registry report available on simonssearchlight.org/research/16p11-2-duplications/.

**Participation & Registration**

The information in this report is made possible by the active participation of the 16p11.2 duplication community! Progress for individuals in your community with a 16p11.2 duplication is shown below – log in to your simonssearchlight.org dashboard today to check for new surveys and tasks. Your data could hold the clues geneticists need to find answers.

**STEP 1**
Sign up online.

**STEP 2**
Provide your clinical lab report.

**STEP 3**
Schedule medical history phone call with a genetic counselor.

**STEP 4**
Fill out surveys.

**STEP 5**
Provide a blood sample if you are interested.

**STEP 6**
We follow up with you over time.

Log in to see next steps.
Information Spotlight: 
Sleep Concerns

The Children’s Sleep Habits Questionnaire is a survey used to understand sleep habits and possible sleep problems in children. All individuals were between 2 and 18 years of age. -- possibly add age range/average age for respondents.

39 children with a 16p11.2 duplication are represented.

Top Sleep Problems for Children with a 16p11.2 Duplication

- Doesn’t fall asleep in 20 minutes
- Restless and moves a lot
- Needs help from others to wake up
- Afraid of sleeping in the dark

It is important to study sleep in children with rare neurodevelopmental disorders because these children are at higher risk for sleep problems, which can negatively impact their behavior and daily functioning.

- Alison Holbrook, PhD

Areas of Sleep Concern in Children with a 16p11.2 Duplication*

- Daytime Sleepiness: 15
- Breathing: 14
- Paroxysms (e.g. sleepwalking): 23
- Night Wakings: 17
- Sleep Anxiety: 17
- Doesn’t Get Enough Sleep: 34
- Delay Falling Asleep: 28
- Bedtime Struggle: 38

*The bars in the graph show the number of children with a more significant problem in each aspect of sleep. **Top Sleep Problems show the most frequently reported problem behaviors related to sleep. Areas of Sleep Concerns are made up of several sleep problem behaviors that are similar in type. Top Sleep Problems may not result in increased concern for Areas of Sleep if similar behaviors are not also a problem.