

## SUPPLEMENTARY METHODS

### Survey Cover Letter

Dear Survey Participant:

With the identification of multiple genes that cause Cornelia de Lange Syndrome, (CdLS) when mutated, we confirmed the variable expressivity of CdLS phenotype.

As a corollary to this, we have also made the observation that some of the patients for whom we have received samples for mutation analysis have very subtle features of CdLS. To the credit of dysmorphologists like yourselves around the country and around the world, these extremely mild diagnoses are being made. This has led us to several theories:

1. Several facial features are likely more useful to dysmorphologists in considering and accurately making the diagnosis of CdLS.
2. There are children with what appears to be isolated mental retardation caused by mutations in *NIPBL*, *SMC1L1* or cooperating genes. These patients may have clinical features only be discernible by subtle changes in the facies.

To address these questions and begin to appreciate how the facies of these patients assists in the diagnosis of CdLS, we are asking you to participate in a survey of facies of 32 patients.

The overwhelming majority of the patients shown have symmetric growth retardation and varying degrees of mental retardation. The majority have mutation-confirmed CdLS, although a significant number have other established diagnoses.

We appreciate that non-facial features are extremely valuable in making the diagnosis of CdLS, however in this survey we are choosing to look carefully at the sensitivity of recognizing CdLS based on facies and what features dysmorphologists use.

Each patient has a frontal and profile photo numbered in the center of the two. Please indicate on the answer sheet whether you think the individual is Classic/severe, Mild or not CdLS. Also please give some indicator of your certainty (1-10) and what features the face demonstrates that helped you to make the diagnosis. The latter is probably the most important to us and all insight is welcomed!

**Recognition of Cornelia de Lange Syndrome Facies: Answer Sheet**

Name \_\_\_\_\_ (Optional)  
 Specialty \_\_\_\_\_  
 Year you attended your first Smith Meeting \_\_\_\_\_  
 Title: Fellow \_\_\_\_\_ Instructor \_\_\_\_\_ Assistant Prof. \_\_\_\_\_  
 Associate Prof. \_\_\_\_\_ Professor \_\_\_\_\_ Chair \_\_\_\_\_ Other \_\_\_\_\_

Patient	CdLS?	Certainty (1 low, 10 high)	Useful Features?/Other Diagnosis?
1	Classic Mild No	_____	_____
2	Classic Mild No	_____	_____
3	Classic Mild No	_____	_____
4	Classic Mild No	_____	_____
5	Classic Mild No	_____	_____
6	Classic Mild No	_____	_____
7	Classic Mild No	_____	_____
8	Classic Mild No	_____	_____
9	Classic Mild No	_____	_____
10	Classic Mild No	_____	_____
11	Classic Mild No	_____	_____
12	Classic Mild No	_____	_____
13	Classic Mild No	_____	_____
14	Classic Mild No	_____	_____
15	Classic Mild No	_____	_____
16	Classic Mild No	_____	_____
17	Classic Mild No	_____	_____
18	Classic Mild No	_____	_____
19	Classic Mild No	_____	_____
20	Classic Mild No	_____	_____
21	Classic Mild No	_____	_____
22	Classic Mild No	_____	_____
23	Classic Mild No	_____	_____
24	Classic Mild No	_____	_____
25	Classic Mild No	_____	_____
26	Classic Mild No	_____	_____
27	Classic Mild No	_____	_____
28	Classic Mild No	_____	_____
29	Classic Mild No	_____	_____
30	Classic Mild No	_____	_____
31	Classic Mild No	_____	_____
32	Classic Mild No	_____	_____