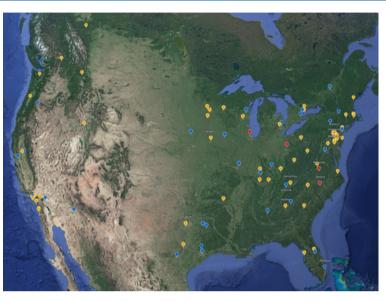
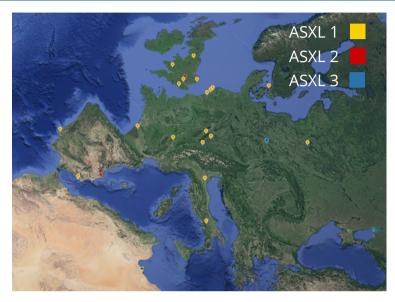
ASXL NEWSLETTER

BIANCA RUSSELL, MD WEN HANN-TAN, MD

LOREN PENA, MD PHD VANDANA SHASHI, MBBS MD

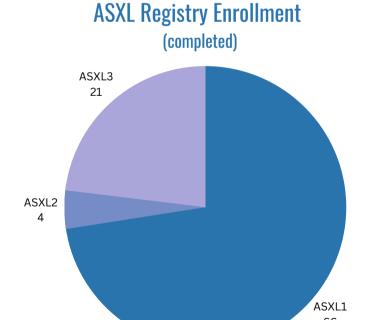
JENNIFER COHEN MD

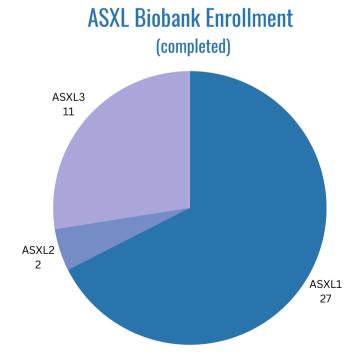




Registry Around the Globe

134 families are enrolled in our Registry or are in the process of enrolling. Not pictured countries include: Australia, New Zealand, Brazil, Colombia, Chile, China, and Egypt.





Puberty Survey

We recently completed a puberty survey through the Registry looking at puberty in individuals with ASXL syndromes.



Amanda Piring UCLA Undergraduate student



Dr. Rebecca Hicks **UCLA Pediatric Endocrinologist**



Dr. Bianca Russell **UCLA Pediatric** Geneticist

9 to less than 12 years old 12 to less than 15 years old

■ Testicle Development

There was a total of 55 participants in the ASXL Registry that completed the survey. **ASXL1: 37**

ASXL2: 2 **ASXL3: 16**

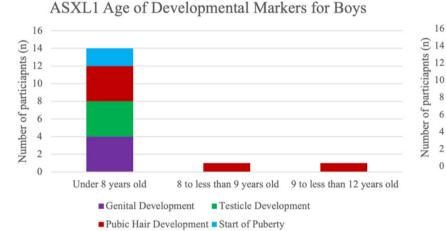
14

Number of particiapnts (n) 5 Number of particiapnts (n) 5 Number of particiants (n) 5

Under 7 years old

■ Pubic Hair Develepment

*The results below are preliminary and unpublished. Due to the small sample size of ASXL2 the results were not able to be quantified in a graph.



ASXL1 Age of Developmental Markers for Girls

7 to less than 8

years old

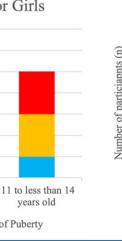
8 to less than 11

years old

■ Breast Development

■ Start of Puberty

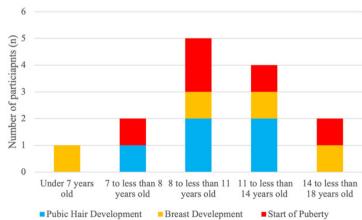






■ Pubic Hair Development ■ Start of Puberty

■ Genital Development



Significantly early ages of reported pubic hair development in males and females show possible precocious puberty in ASXL1. Preliminary findings indicate differences in ASXL1 and ASXL3 findings.

Clinical Research ID (CRID)

A Clinical Research ID (CRID) is a patient generated unique identifier that can be shared with researchers. This facilitates de-identified data sharing between researchers. We sent out a survey to all active participants to collect CRIDs in an effort for more collaborative research. Learn more at: https://thecrid.org/.

JJ Nickname: First Name: Jon Smith Lastname: Male

Birth Date: 2012-06-14 YMD

A1B2 C3D4

name@email.com name@anotheremail.com







Do individuals with **Bohring-Opitz Syndrome have** distinct brain waves?

> For eligibility criteria and enrollment: asxl-chromatin-registry@mednet.ucla.edu

BOS EEG Study Updates

The BOS EEG study aims to identify an EEG signature for children with Bohring Opitz Syndrome. So far we have 27 participants, We are still looking for 3 more participants. Our preliminary data looks promising and we are excited about publishing the results of this study.

Upcoming Registry Surveys

Our next surveys will collect basic demographic information on ASXL2 and ASXL3 participants. Additionally, we plan to focus on sending out validated neurodevelopmental surveys to ASXL1/2/3 participants. These are standardized assessments that will allow for comparison with other syndromes.

RECENT PUBLICATIONS USING REGISTRY AND BIOBANK DATA

Lin, I., Wei, A., Awamleh, Z., Ning, A., Herrera, A., Singh, M., Weksberg, R., Russell, BE., Arboleda, VA. Truncating ASXL1 **Mutations in Bohring-Opitz Syndrome Dysregulate Canonical and Non-Canonical Wnt-Signaling**

Lin, I., Awamleh, Z., Wei, A., Russell, B., Weksberg, R., Arboleda, VA. ASXL1 mutations that cause Bohring Opitz Syndrome (BOS) or acute myeloid leukemia share epigenomic and transcriptomic signatures



Thank you to the ARRE Foundation and the BOS Foundation for their continued financial support!

