

Can research
really change
the future of
autism?

**You can SPARK
research with
one click.**



SPARK

Powering **A**utism
Research
for **K**nowledge

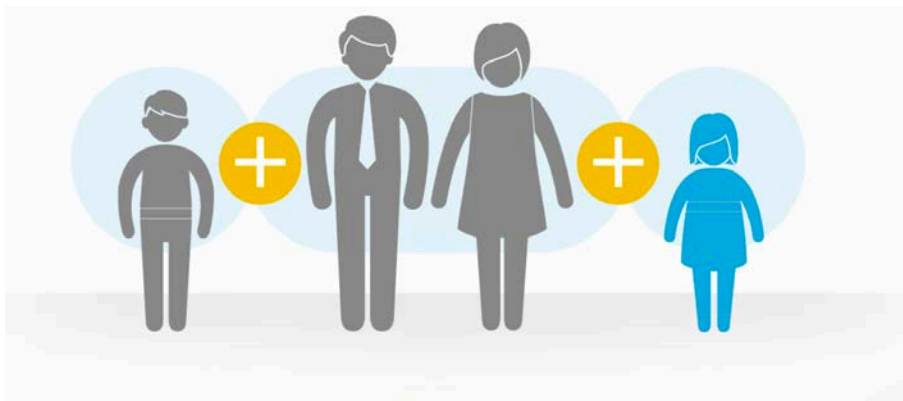
Pamela Feliciano, Ph.D.
Scientific Director, SPARK

July 19, 2016

SPARKforAutism.org

The goals of SPARK are to:

- Establish a research partnership with thousands of individuals affected with ASD and their family members
 - Participation in future studies is not required but participants agree to be re-contacted
- Accelerate research and improve understanding of ASD
 - SPARK will catalyze this by making access to the cohort and data available to ANY qualified scientist in the research community



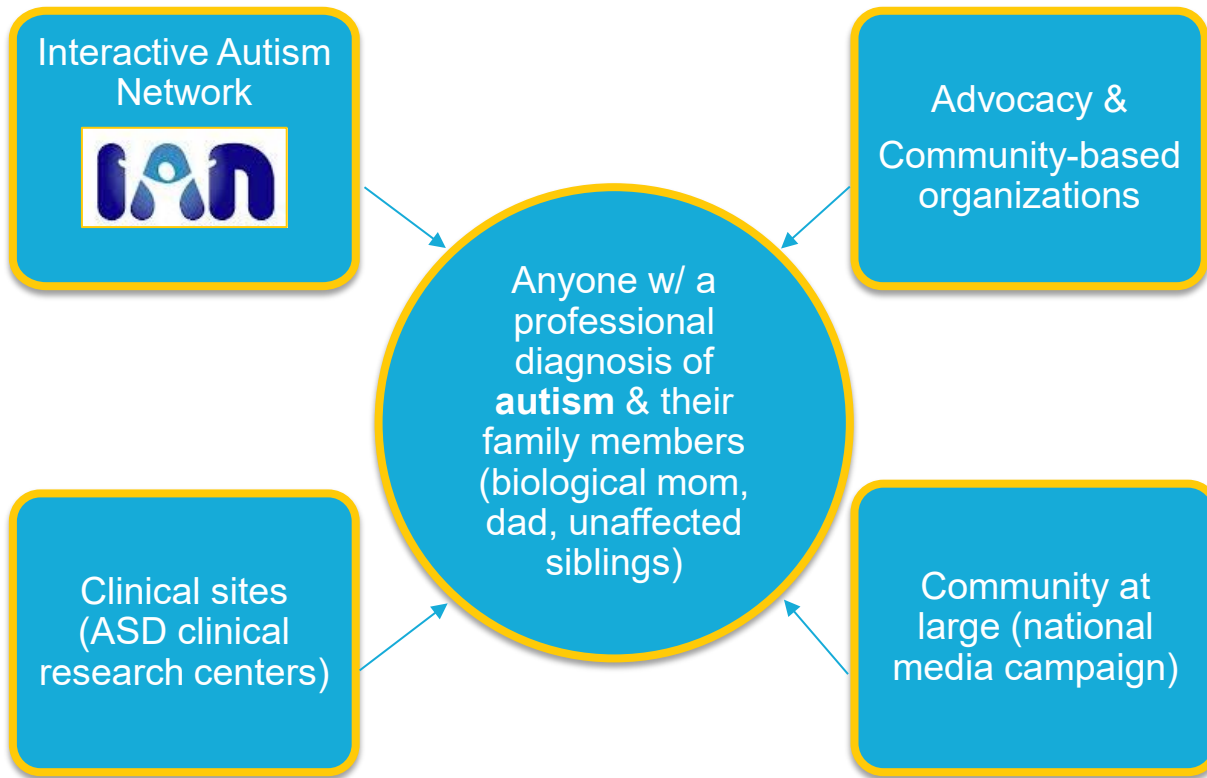
Participation in SPARK



Building a Research Partnership



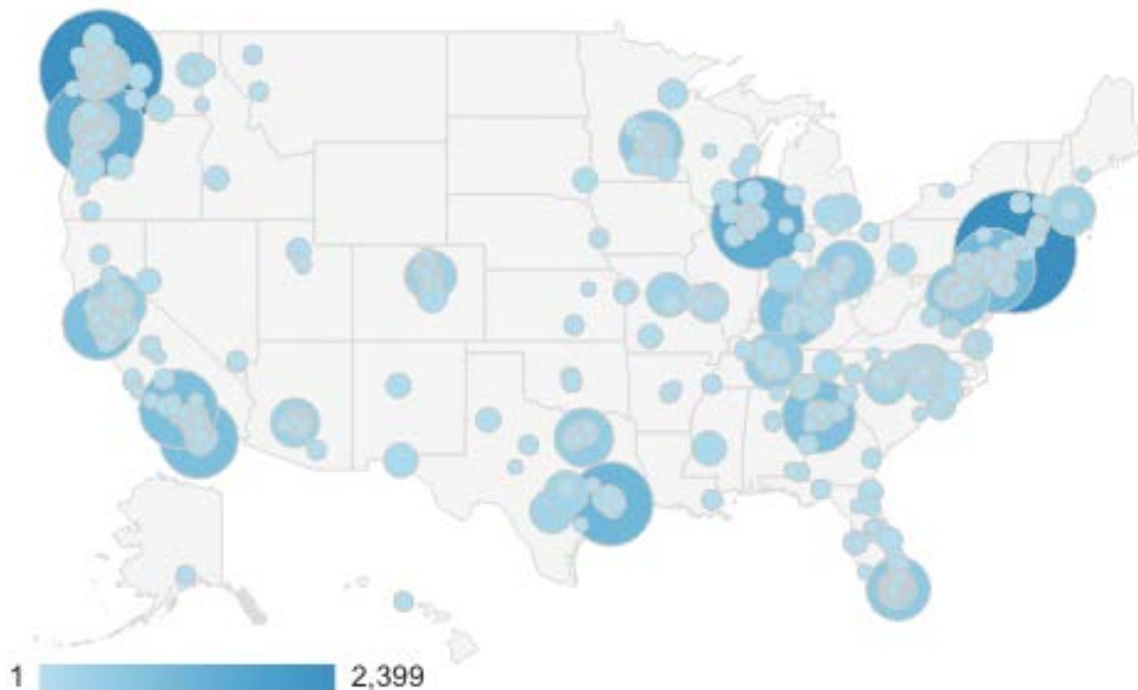
SPARK Recruitment



SPARK Clinical Site Network



Distribution of Unique Web Users on SPARKforAutism.org

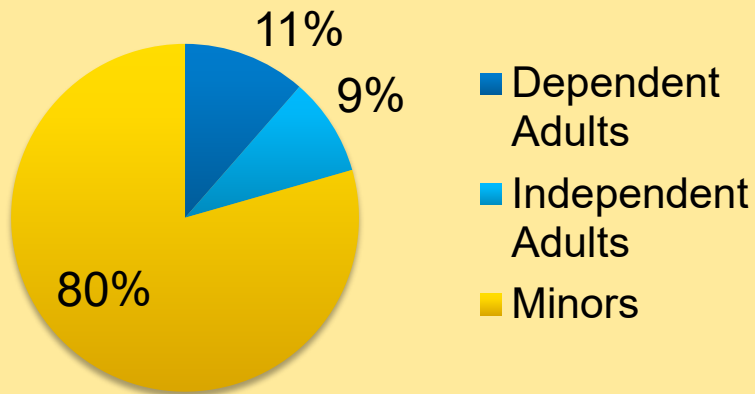


* Data as of 7.13.16

SPARK Participants

- Total number of participants: 17,659
- **67%** completion rate

Individuals with ASD (n=7,140)



	Children (n=5,672)	Adults (n=1,468)
Demographics		
Male, n (%)	4,560 (80%)	970 (66%)
Female, n (%)	1,112 (20%)	498 (34%)
Age in years, mean (SD)	8.7 (4.2)	32.2 (12.2)

* As of 7.7.16

SPARK Participants

Diagnostic characteristics	Children (n=5,672)
Ever intellectual disability diagnosis, n (%)	953 (17%)
Ever ASD services, n (%)	5,095 (90%)
Ever IEP, n (%)	4,749 (84%)
Age at ASD diagnosis in years, mean (SD)	4.1y (2.6y)
Language ability, n (%)*	
No words / does not speak	713 (12%)
Uses single words meaningfully	737 (13%)
Combines 3 words together into sentences	948 (16%)
Uses longer sentences	3,628 (63%)
SCQ total score, mean (SD)	23.0 (7.0)

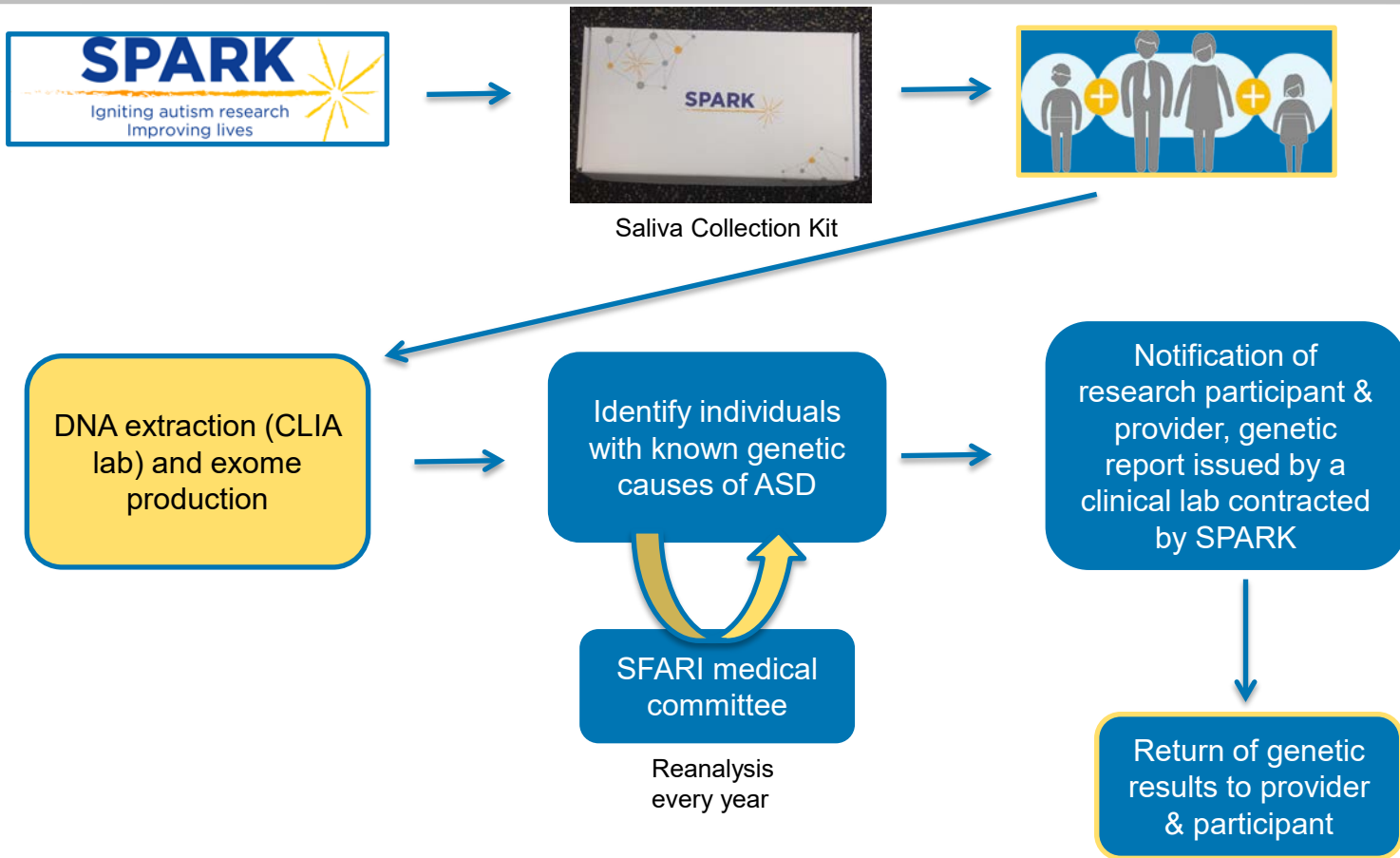
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Advancing Precision Research & Precision Medicine

- Autism is genetically & phenotypically heterogeneous
- New treatments are likely to be diverse
- SPARK will set up infrastructure required for targeted clinical research
- Participants can be re-contacted according to genotype and phenotype
- Investigators can recruit based on their study's criteria



Genetic Analysis in SPARK



Next steps for SPARKforAutism.org

- Return of behavioral and genetic results
- Sequencing of thousands of ASD trios
- Data releases beginning end of 2016
- Open for recruitment by researchers
- Sign up for our newsletter at SPARKforAutism.org to stay abreast of our latest updates



Thank you to SFARI & the SPARK team



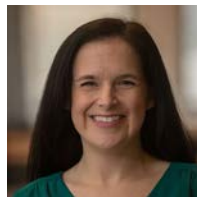
Wendy Chung
Dir. Clinical Research



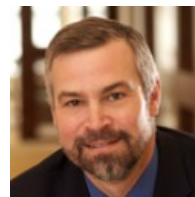
Pamela Feliciano
Scientific Director



LeeAnne Green Snyder
Clinical Research Sci.



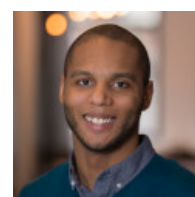
Amy Daniels
Project Manager



Alex Lash
Chief Inform. Officer



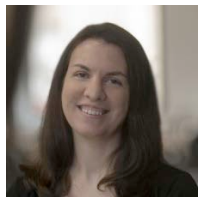
Jennifer Tjernagel
Proj. Manager, VIP



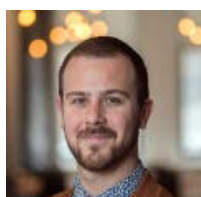
Noah Lawson
Res. Data Analyst



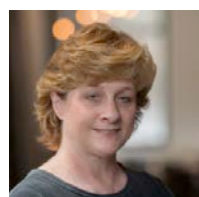
James Hohman
Software Engineer



Casey White-Lehman
Project Manager, SSC



Vincent Myers
Research Assistant



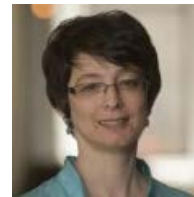
Karen Walton-Bowen
Clinical Operations



Julie Manoharan
Project Coordinator



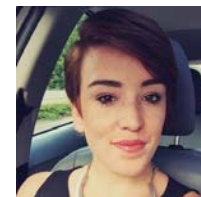
Elizabeth Brooks
Asst. Proj. Man., SSC



Natalia Volfovsky
Analytics Manager



Chris Rigby
Sr. Software Engi.



Alex Stephens
Admin. Assistant



Alpha Amatyia
Sr. Software Engineer



Richard Marini
Sr. Software Engineer



Martin Butler
Software Engineer



Andrei Salomатов
Bioinformatics Eng.



Hana Zaydens
Research Assistant



Luke Grosvenor
Administrative Assistant

