12:50 – 2:00PM	1 hr 10 min	Farid Vij, Ciitizen Lukas Lange, Probably Genetic Rick Barkley, Everlum Paul Kruszka, Gene Dx Madeleine Braun, Jackson Labs	Resources for Rare Disease Organizations	Opportunity to learn about a variety of services (for profit) offered to the rare disease community for the advancement of rare disease research.
		Nina Gonzaludo, PacBio Rachel Thomas, Elpida		
2:00 – 2:45 PM	45 min	Mike Graglia, SynGAP Research Fund, Inc.	Early Research Funding: Parent Experience	Mike Graglia, Founder of the SynGAP Research Fund will share his personal experiences in building a disease foundation from scratch and funding strategies.
2:45 – 3:45 PM	1 hr	Tom Kassberg, Ultragenyx Neil Kumar, BridgeBio Shalini Sharp, Neurocrine Biosciences	Panel Discussion: Late-stage Funding – Partnerships and VCs	Tom Kassberg, CBO of Ultragenyx, Neil Kumar, CEO of BridgeBio, and Shalini Sharp, Board Member of Neurocrine Biosciences, will lead a panel discussion on partnering and funding.
3:45 - 4:00PM	15 min		BREAK	
4:00 – 4:45 PM	45 min Sunitha Malepati, CACNA1A Foundation		Rare Parents as Drug Development Catalysts	Sunitha Malepati, Vice President & Treasurer of CACNA1A Foundation will share her parent journey through rare disease and involvement with the CACNA1A Foundation.



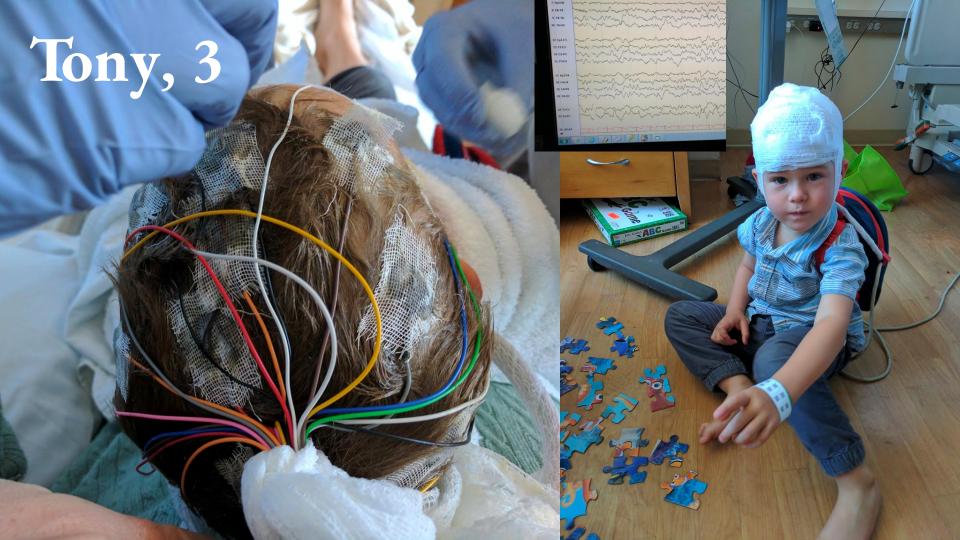
syngap.fund/ultra

# SYNGAP RESEARCH FUND

Collaboration. Transparency. Urgency.







## Tony's Dx Journey - How many fall through the cracks?

- Delays evident at 2, one clear seizure at 3, EEG confirming Epilepsy
- First, a negative CMA, then Invitae Panel leading to VUS confirmed by RNA Seq. Pathogenic diagnosis just after 4th birthday.
- Two places where most people stop: CMA negative & VUS.



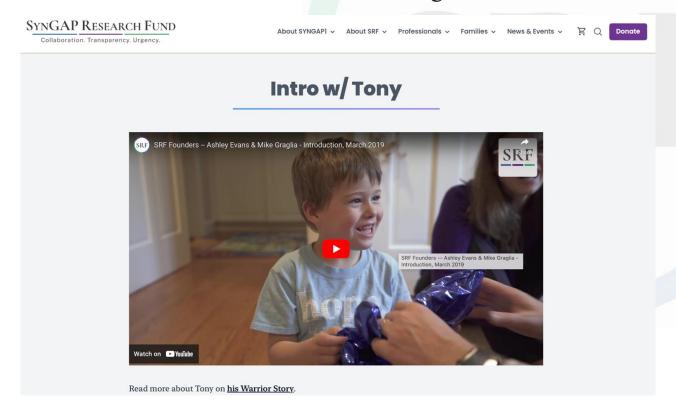








#### We launched SRF with a commitment to give \$1m in SYNGAP1



#### Mike - Tony's Dad & SRF's Founder

Left my career a few years ago to lead SRF. In addition to working with the team of SynGAP families and partners, I serve on Executive Board of COMBINEDBrain, AES Epilepsy Research Benchmarks Stewards Committee and work closely with Innovation and Value Initiative Methods Summit & Personalized Medicine Coalition and FasterCures LeadersLink.









Professional background in global development, healthcare strategy, finance and planning at top-tier institutions.









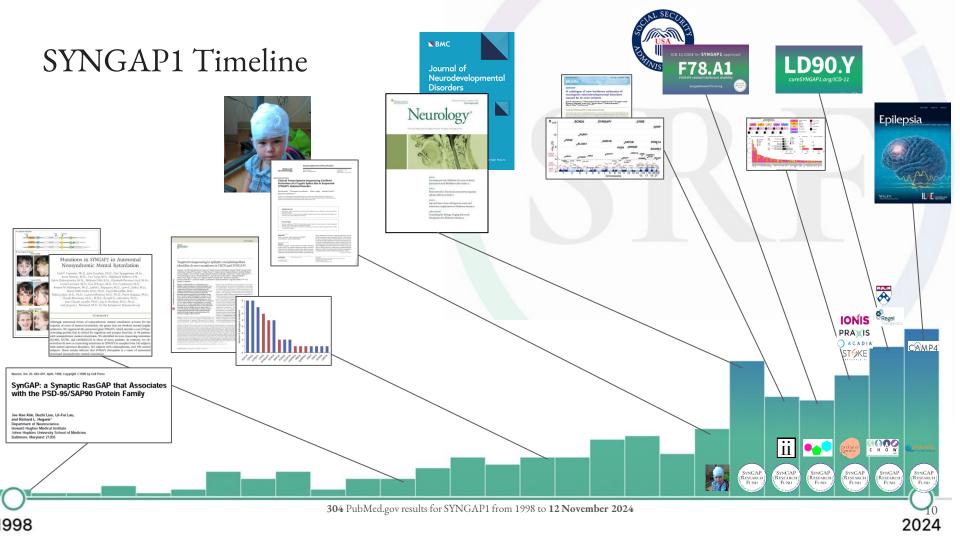
Educational background in Mathematics (BS), International Economics (MA) and Finance (MBA).



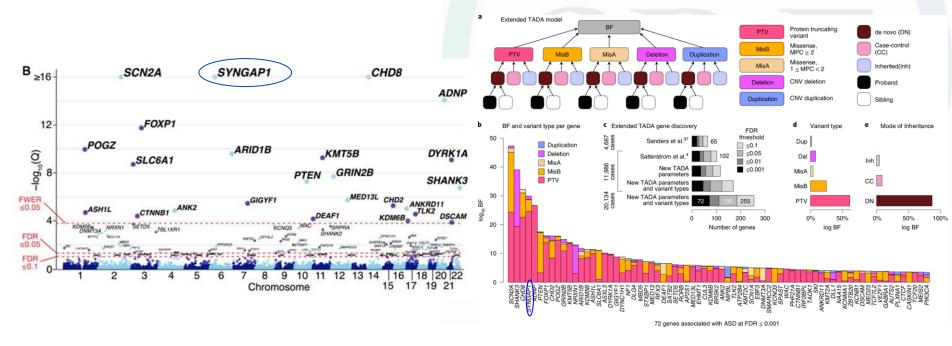








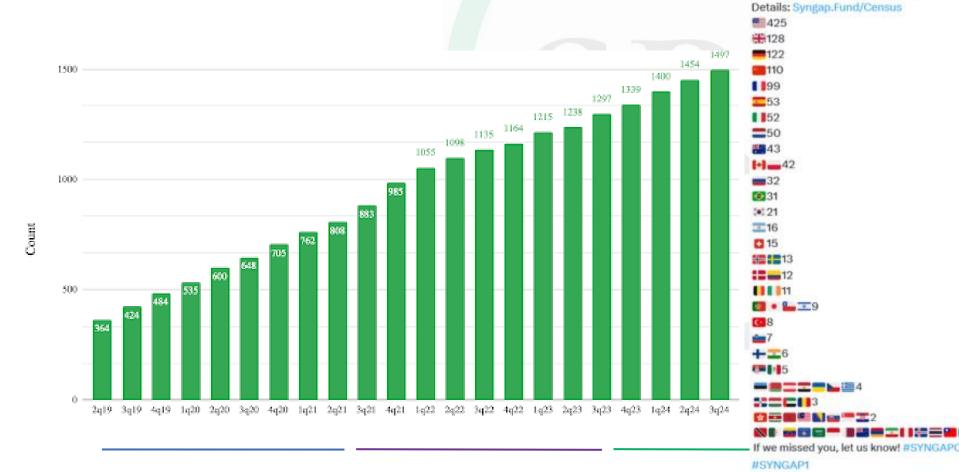
## SYNGAP1 highly associated with Autism



**Satterstrom** et al. Large-Scale Exome Sequencing Study Implicates Both Developmental and Functional Changes in the Neurobiology of Autism. *Cell.* **2020** Feb 6;180(3):568-584.e23.

**Fu** JM, Satterstrom FK, Peng M, et al. Rare coding variation provides insight into the genetic architecture and phenotypic context of autism. *Nat Genet*. **2022**;54(9):1320-1331.

# #SyngapCensus - Patients known to SRF 4x in 4 years



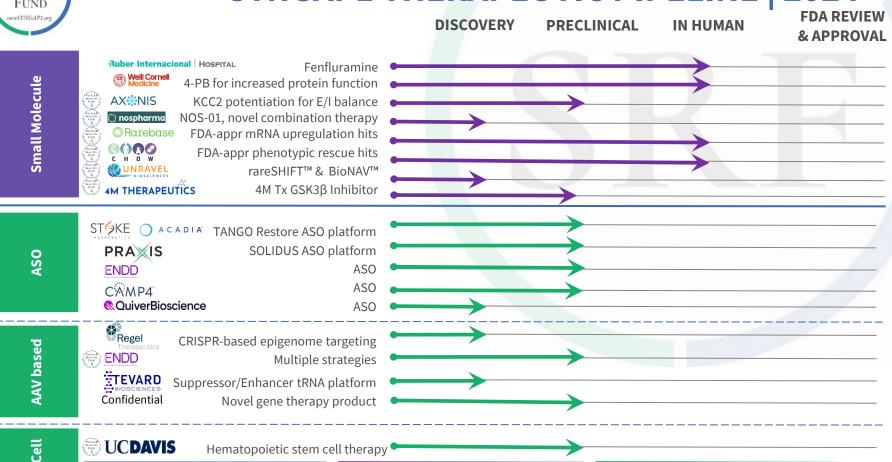
SynGAP Research Fund (SRF) 📀

How many people have SYNGAP1? 3Q24 #SYNGAPcensus = 1,497

@cureSYNGAP1

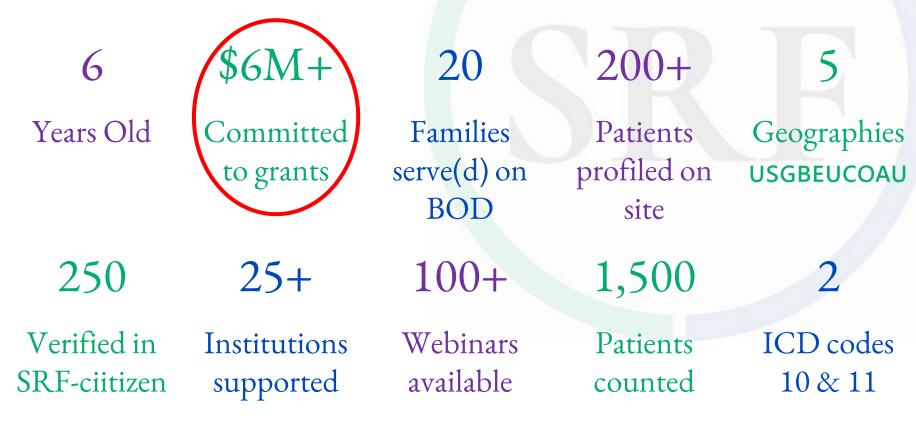


#### **SYNGAP1 THERAPEUTIC PIPELINE | 2024**





#### Overview: SRF in numbers



# Growing volume and cost of grants



## It gots complicated fact. I have a 20 grants in flight to day

= Remaining +

\$213,750

\$65,000

\$183,545

\$41.043

Fully Funded

Fully Funded

Fully Funded

**Fully Funded** 

\$65,000

\$13,609

\$50,000

\$78,190

\$15,000

\$100,000

\$50,000

\$7,000

\$186,700

\$196,672

\$130,000

\$128,888

\$130,000

\$186,700

\$2,000,265

\$65,377

\$10,000

\$130,000

\$105,000

\$100,000

\$156,380

\$25,000

\$100,000

\$50,000

\$7,000

\$186,700

\$196.672

\$130,000

\$128,888

\$130,000

\$186,700

\$5,290,252

11	It gets complicated fast - I have ~20 grants in flight today.											
Year	Institution	Prof/Focus	Commitment	= Remaining +	Year	Institution	Prof/Focus	Commitment				
2018	Hopkins	Huganir	\$500,000	Fully Funded	2022	Rarebase	FM 38, 40, 41, 45	\$570,000				
2018	Scripps	Rumbaugh	\$205,500	Fully Funded	2022	Hopkins	Coller	\$130,000				
2018	Baylor	Holder	\$130,000	Fully Funded	2022	Edinburgh	Cobb/Kind	\$183,545				
2019	UCSF	Lowenstein	\$10,000	Fully Funded	2022	USC	Quadrato	\$130,000				
2019	Penn	Heller	\$130,000	Fully Funded	2022	Harvard/BCH/Axo	r Xin/Kadam	\$140,000				
2020	Ciitizen	Brimble	\$40,000	Fully Funded	2023	Cornell	Cunnane (Med Stu)	\$5,000				
2020	Ontizon	Difficio	Ψ-10,000	i dily i dilaca				A				

Fully Funded

**Fully Funded** 

Fully Funded

**Fully Funded** 

\$65,133

Fully Funded

Fully Funded

Fully Funded

Fully Funded

Fully Funded

Fully Funded

\$20,000

Fully Funded

Fully Funded

\$15,647

\$0

\$58,388

\$46,500

\$14,200

\$130,000

\$70,191

\$238,133

\$63,750

\$1,286

\$150,000

\$19,672

\$99,909

\$15,600

\$148,000

\$1,250

\$65,000

\$42,700

\$187,299

\$115,000

2020

2020

2020

2021

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2022

2022

USC

JCU

USC

Harvard

Harvard

Rarebase

Rarebase

Nebraska

**UC Davis** 

Penn

Turku

McGill

**Combined Brain** 

Canada Models

Probably Genetic

Fundacion NICE

Jackson Labs

Coba / Quadrato

Function, round 1

**UBC & Montreal** 

Zempleni

Aledo

**MDBR** 

Courtney

TBD

**Bowie** 

Lukas Lange

Joe Anderson

Frazier

Coba

DSC

Poduri

**IPSC** 

**IPSC** 

2023

2024

2023

2023

2023

2023

2023

2023

2023

2023

2023

2023

2024

2024

2024

2024

Utah

JCU

Turku

**Toronto** 

Ottawa

Cornell

NYU

Jax

Florey

**UCSF** 

Jax

Nebraska

U. Ottawa

Edinburgh (UK)

AES/CHOP

Stanford

Chow

McKee

**Knowles** 

Frazier

Postilla

Andrade

Lacoste

Grinspan

Devinsky

Zempleni

Willsey

Lacoste

Simon

Donlin-Asp

Waters

Simon

# 2023 Event Recap

- Million Dollar Bike Ride | \$31k raised + \$30k match
- Sprint4Syngap | \$252k raised
  - Tavillas carry this event (\$166k raised)
- 3rd Annual Cannonball for a Cure | \$130k raised
- 3rd Annual SRF Gala (Caren Leib | \$80k raised
- 2nd Annual Scramble for Syngap | \$25k raised
- 2nd Syngap Soiree | \$300k+ raised
- 1st Annual Syngap Paddleslap | \$20k raised







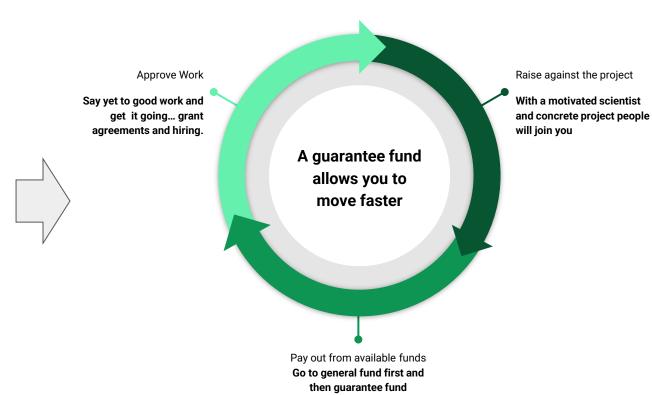


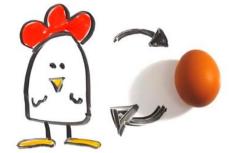
		2018	2019	2020	2021	2022	2023	2024 YTD 11/13	Total
990 Revenue (line 12)	Α	\$20,000	\$382,888	\$590,087	\$1,357,074	\$2,189,895	\$1,859,673	\$1,494,668	\$7,894,285
990 Expense (line 18)	В	0	\$52,910	\$225,407	\$874,679	\$1,192,705	\$2,151,196	\$1,501,675	\$5,998,572
Net	A - B	\$20,000	\$329,978	\$364,680	\$482,395	\$997,190	-\$291,523	-\$7,007	\$1,895,713
Direct Payments	F = C+D+E	\$361,833	\$0	\$0	\$250,000	\$0	\$0	\$0	\$611,833
Total SRF Raised	G = A+F	\$381,833	\$382,888	\$590,087	\$1,607,074	\$2,189,895	\$1,859,673	\$1,494,668	\$8,506,118
Total SRF Spent	H = B+F	\$361,833	\$52,910	\$225,407	\$1,124,679	\$1,192,705	\$2,151,196	\$1,501,675	\$6,610,405
Spend	H/G	94.8%	13.8%	38.2%	70.0%	54.5%	115.7%	100.5%	77.7%
Founders Gifts to SRF	I	\$20,000	\$51,701	\$51,758	\$209,317	\$175,000	\$256,080	\$300,000	\$1,063,856
Founders Direct giving	С	\$111,833	\$0	\$0	\$0	\$0	\$0	\$0	\$111,833
Total Founder Spend	K = I + C	\$131,833	\$51,701	\$51,758	\$209,317	\$175,000	\$256,080	\$300,000	\$1,175,690
% SRF Revenue	K/G	34.53%	13.50%	8.77%	13.02%	7.99%	13.77%	20.07%	13.82%
Founders Soft Credits	L	0	\$255,000	\$84,500	\$51,079	\$233,006	\$245,920	\$455,000	\$1,324,505
Founder Direct Donors	M = D+E	\$250,000			\$250,000		0	0	\$500,000
Total Founder Impact	N = K + L + M	\$381,833	\$306,701	\$136,258	\$510,396	\$408,006	\$502,000	\$755,000	\$3,000,195
% SRF Revenue	N/G	100.00%	80.10%	23.09%	31.76%	18.63%	26.99%	50.51%	35.27%
Jones	0				\$93,307	\$326,000	\$345,166	\$90,841	\$855,314
Tavilla	Р				\$11,894	\$189,784	\$229,369	\$89,930	\$520,978
Stelmaszek	Q				\$2,114	\$133,921	\$120,203	\$51,629	\$307,866
Kessler	R				\$31,197	\$81,073	\$71,405	\$77,542	\$261,217
Foster/Freirich	S				\$20,000	\$45,000	\$108,503	\$61,954	\$235,457
Miles	Т				\$400	\$27,412	\$18,674	\$24,980	\$71,466
	U = O+P+Q+R+S+	Г			\$158,912	\$803,190	\$893,320	\$396,876	\$2,252,298
	U/G				9.89%	36.68%	48.04%	26.55%	26.48%

		2018						22	2023	2024 YTD 11/13	Total
990 Revenue (line 12)	Α	\$20,000		Founders N		Leading Far		,189,895	\$1,859,673	\$1,494,668	\$7,894,285
990 Expense (line 18)	В	0	4000/	rounders i	ietwork	Founder	IS DIFECT	,192,705	\$2,151,196	\$1,501,675	\$5,998,572
Net	A - B	\$20,000	100%					997,190	-\$291,523	-\$7,007	\$1,895,713
Direct Payments	F = C+D+E	\$361,833						\$0	\$0	\$0	\$611,833
Total SRF Raised	G = A+F	\$381,833						100 005	<b>64 050 070</b>	* 1,121,000	\$8,506,118
Total SRF Spent	H = B+F	\$361,833						,192,705	\$2,151,196	\$1,501,675	\$6,610,405
Spend	H/G	94.8%	75%					54.5%	115.7%	100.5%	77.7%
			_								
Founders Gifts to SRF	I	\$20,000	_					175,000	\$256,080	\$300,000	\$1,063,856
Founders Direct giving	С	\$111,833						\$0	\$0	\$0	\$111,833
Total Founder Spend	K = I + C	\$131,833						175,000	\$256,080	\$300,000	\$1,175,690
% SRF Revenue	K/G	34.53%						7.99%	13.77%	20.07%	13.82%
			50%								
Founders Soft Credits	L	0						233,006	\$245,920	\$455 00	\$1,324,505
Founder Direct Donors	M = D+E	\$250,000							0		\$500,000
Total Founder Impact	N = K + L + M	\$381,833						408,006	\$502,000	\$755,000	\$3,000,195
% SRF Revenue	N/G	100.00%					ì	. 2 63%	30 /0	50.51%	35.27%
Jones	0							326,000	\$345,166	\$90,841	\$855,314
Tavilla	Р		25%					189 - 4	\$ <sub>-</sub> 39,369	\$89,930	\$520,978
Stelmaszek	Q							.33,921	\$120,2.3	\$51,629	\$307,866
Kessler	R							\$81,073	\$71,405	\$77,542	\$261,217
Foster/Freirich	S							\$45,000	\$108,503	391,954	\$235,457
Miles	Т							\$27,412	\$18,674	\$24,500	\$71,466
U	J = O+P+Q+R+S+	Т						803,190	\$893,320	\$396,876	\$2,252,298
	U/G		0%					36.68%	48.04%	26.55%	26.48%

#### A guarantee fund can allow you to move faster

We can't raise funds till we have a project and we can't start a project till we have funds...





#### What I think is important after working on this for 5+ years

Three Essential Concepts - These are ideas that you have to embrace if you are seriously going to do some fundraising

Four Major Learnings - Realizations I've had along the way and want you to know.

Ten helpful tips - These are things I've learned, generally by doing the opposite first. I have iterated relentlessly and made so many mistakes.

Schedule A (Form 990) 2022

SynGAP Research Fund Incorporated

83-1200789

Page 2

#### Part II Support Schedule for Organizations Described in Sections 170(b)(1)(A)(iv) and 170(b)(1)(A)(vi)

(Complete only if you checked the box on line 5, 7, or 8 of Part I or if the organization failed to qualify under Part III. If the organization fails to qualify under the tests listed below, please complete Part III.)

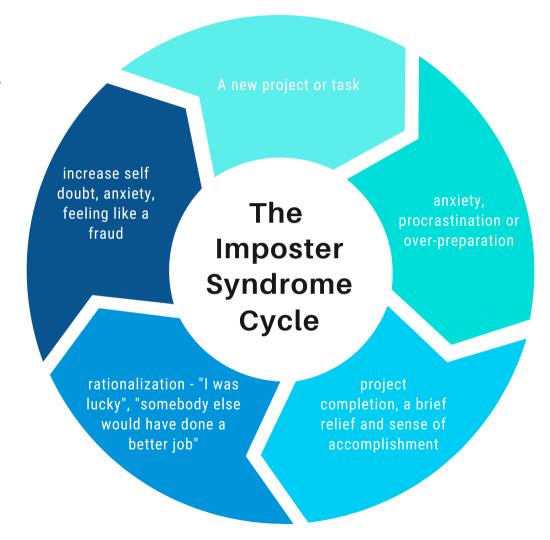
**Section A. Public Support** 

Calendar year (or fiscal year beginning in)	<b>(a)</b> 2018	<b>(b)</b> 2019	(c) 2020	<b>(d)</b> 2021	<b>(e)</b> 2022	(f) Total	
1 Gifts, grants, contributions, and membership fees received. (Do not include any "unusual grants.")	20,000.	382,888.	590,087.	1,364,391.	2,144,228.	4,501,594.	

# You are exactly where you need to be.

Don't waste time doubting yourself, your loved ones can't afford it.

Jump in and own what you are doing, it's incredibly hard and important. You can't afford self-sabotage.



#### The universe is naturally abundant

You have to have this mindset if you are fundraising.

Do not talk yourself out of believing you will find the money.

If you don't believe it, who will?



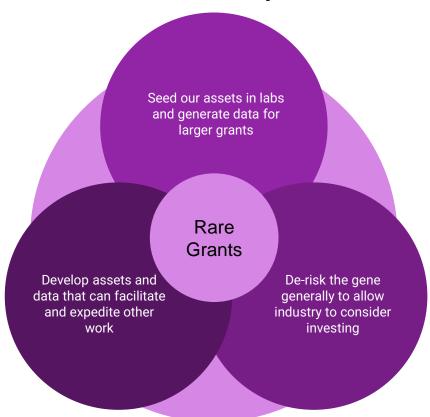
#### Our capital is rare - Seed, Risk tolerant & Catalytic

What do you say when they ask "Why should I give you money?"

Our deep commitment to disease X means we will take risks nobody else will, this isn't an opportunity, it's an obligation.

It can be catalytic to other capital — otherwise we are kidding ourselves — we are also scaffolding or derisking the target.

- 1. Getting researchers data for larger grants and seeing out assets in their labs.
- 2. Scaffolding the target Developing assets like iPSCs or models.
- 3. De-risking the target Developing clinical trial endpoints, natural history, etc.



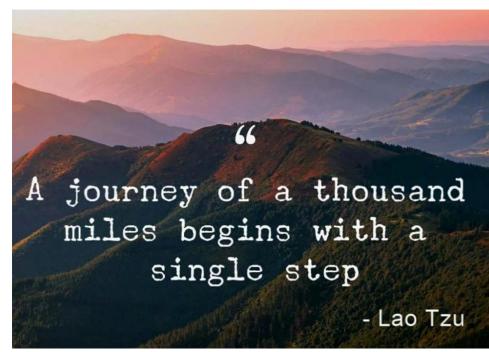
#### e.g. Your work increases your scores on tables like this.

	US / EU	Target	Gene				Tx	Nat	PC	Clin.	Pat.				Clin.	Mkt.	
Disease Name	Preva lence	Gene	Size	Inher.		Onset	Me ch.	Hist.	Mod.	Dev.	Org.	SZ	ID	MD	Need	Орр.	Disease Summary
			Inte m	al Develo	opme nt	Candidate	s - Gene	tic Ne	urode ve	lopmer	ntal Dis	orders	& Epile	ptic Sy	ndrome	5	
SCN2A-Related Disorders	62,133	SCN2A	6,018	AD		<12 m	4	5	4	4	5	4	5	3	5	5	Moderate-severe ID, autism; refractory epilepsy
SCN8A-Related Disorders	57,275	SCN8A	5,943	AD		<6 m	3	5	4	3	4	3	5	4	4	5	Severe ID, refractory epilepsy with regression
Dravet Syndrome	56,031	SCN1A	5,997	AD		<12 m	5	5	5	5	5	5	5	4	5	3	Severe-profound ID, DD & intractable epilepsy
CHD2 Encephalopathy	53,183	CHD2	5,487	AD		<2 y	5	5	4	4	1	5	4	2	4	5	Moderate-severe ID with refractory epilepsy
Phelan-McDermid Syndrome	51,321	SHANK3	5,193	AD		<2 y	5	5	4	4	5	4	5	4	5	5	Moderate-severe ID, DD autism; seizures in 40%
SYNGAP1 Encephalopathy	47,491	SYNGAP1	4,032	AD		<2 y	5	5	5	5	5	5	5	4	5	5	Severe ID with up to ~200 seizures per day
GRIN2B-Related Disorder	45,960	GRIN2B	4,455	AD		<4 y	4	4	1	3	5	4	5	4	4	4	Moderate-severe ID; 50% epilepsy, > 25% autism
1A Neurological Disorder	40,559	KIF1A	5,073	AD		<2 y	4	4	3	4	5	3	4	4	5	5	Severe ID, epilepsy; regression
Rett Syndrome	38,879	MECP2	1,461	XL		<18 m	4	5	5	4	5	4	5	5	5	4	Neurodegeneration with ID, autism & early death
Smith-Magenis Syndrome	31,103	RAI1	5,721	AD		<6 m	5	4	5	4	5	2	5	3	4	5	Moderate ID, DD with autism; no epilepsy
DNM1 Encephalopathy	29,408	DNM1	2,595	AD		~6 m	4	5	5	5	5	5	5	5	5	5	Profound ID, DD with intractable epilepsy
STXBP1 Encephalopathy	28,108	STXBP1	1,785	AD		<8 m	5	5	4	5	5	5	5	4	5	5	Profound ID, DD with resistant epilepsy & autism
KCNQ2 Encephalopathy	25,487	KCNQ2	2,619	AD		<1 m	4	4	4	4	5	5	5	5	5	5	Severe ID, DD and neonatal onset epilepsy
SLO8A 1-Related Disorder	20,603	SLC8A1	1,800	AD		<4 y	5	4	2	4	5	4	4	3	4	5	Moderate ID, epilepsy with regression
CDKL5 Deficiency Disorder	16,868	CDKL5	2,883	XL		<3 m	4	5	4	5	5	5	5	5	5	3	Devastating DD, ID & epilepsy
GABRB3 Associated Epilepsy	16,633	GABRB3	5,783	AD		<12 m	4	5	4	4	3	4	4	3	4	5	Moderate ID, resistant epilepsy; ~25% autism
SETD5 Syndrome	12,388	SETD5	4,329	AD		<2 y	5	4	5	3	2	1	4	2	4	5	Moderate ID & DD; ~25% autism
PRRT2 Dyskinesia & Epilepsy	11,664	PRRT2	1,023	AD		<1 y	4	4	4	3	1	4	3	4	3	4	Infantile epilepsy, dyskinesia; some ID
CACNA1A-Related Disorders	7,778	CACNA1A	7,527	AD		<10 y	4	3	3	4	5	4	2	4	3	4	Highly variable spectrum
GLUT1 Deficiency Syndrome	7,422	SLC2A1	1,479	AD		<1 y	5	5	5	4	5	5	4	5	4	4	Moderate ID, DD, epilepsy & motor disorder

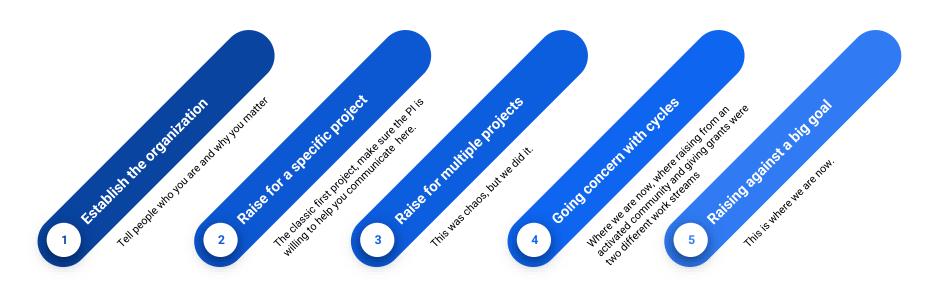
Language & culture matters: "We can fill an unmet need together" vs "I need to raise \$100k".

The sooner you go to the community with a project and urge them to support it, the sooner this gets real.

In addition to fundraising you are activating a community.



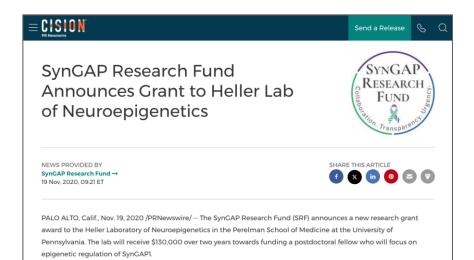
## How you fundraise will change as you grow,



#### It's darkest before the dawn

A stalled fundraiser feels like a public failure, it's not.

These gaps are when people who can fill gaps step forward.



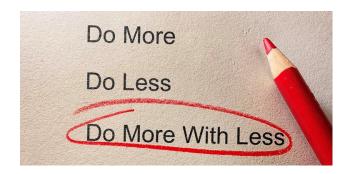


#### Donors don't love overhead, be ready to discuss.

# Option 1: Good news we don't spend much on overhead!

You are just starting and working on a shoestring, so go ahead and own that.

Put a time limit on it.



# Option 2: Refocus the conversation on capacity building.

We need a dedicated organization for this disease and organizations need funding to grow.

Help with your Ws: Wealth, Wisdom or Work.



#### 10 Tips

- 1. Hire someone, this is a ton of work Virtual assistant or parent.
- 2. Plumbing matters, don't ignore it Scalable tech to move & track money.
- 3. Communicate relentlessly Podcast/Videos, Social, Newsletter.
- 4. Call people to thank and to ask You learn what matters in calls.
- 5. Throw and annual event ASAP Events trigger donations, get it going.
- 6. Don't pay overheads to large institutions They get it, put policy on your site.
- 7. Press Releases matter, use them. Eureka Alerts is reasonable.
- 8. Newly diagnosed families panic, give them something to do. Page for kiddo.
- 9. Don't skip the audit These are useful, credibility building and not that bad.
- 10. Liquidate stocks upon receipt You are not in the stock business.

## SRF has three SYNGAP1 podcasts for patient finding & support



#### Episodes V

SATURDAY - VIDEO

113. Fondo sets the bar for LatAm Engage 2nd Soiree was a hit, grants are rolling in! Super Heroine: Vicky Arteaga Fondo Syngap is tirele https://www.syngapresearchfund.org/professionals/20

#### SynGAP10 weekly 10 minute updates on SYN

Syngap Research Fund, 501(c)(3)

★ 5 (70) · NON-PROFIT · UPDATED WEEKLY



#### Episodes V

AUGUST 29

Mike Graglia, SRF Managing Dir. & SYNGAI difficult. Tony's experience shows that it's Show Notes Going back to school is difficult for most and other rare diseases, it is especially hard! Mike Grag



#### **SYNGAP1 Stories**

Syngap Research Fund, 501(c)(3)

PARENTING - UPDATED BIWEEKLY



#### Café SYNGAP1

Syngap Research Fund, 501(c)(3)

PARENTING · UPDATED BIWEEKLY

Bienvenidos al nuevo podcast de SRF en Español: Café Syngap1 pretender ser un espacio para encontrar apoyo, consejos y esperanza en una comunidad de Padres, Hermanos, Investigadores, Científicos, Terapeuta MORE

► Latest Episode













#### Episodes V

AUGUST 2

 Episodio 01: Valeria Torcetta y su hija Charo- La Primera Paciente Diagnosticada con SynGAP1 en America Latina

Episodio #01 Bienvenidos a nuestro nuevo podcast, Café SynGAP1! En nuestro primer episodio, nos acompaña Valeria Torcetta, una invitada especial quien nos habla sobre Charo, su hija con Syngap1, y primera pa...

3 min





# Thank you. mike @cure SYNGAP1.org @cureSYNGAP1

## Build community <u>and</u> leverage giving: 1:2:6

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		2018	2019	2020	2021	2022	Total	Notes
990 Revenue (line 12)	Α	\$20,000	\$382,888	\$590,087	\$1,357,074	\$2,144,228	\$4,494,277	
990 Expense (line 18)	В	0	\$52,910	\$225,407	\$874,679	\$1,192,705	\$2,345,701	
Net	A - B	\$20,000	\$329,978	\$364,680	\$482,395	\$951,523	\$2,148,576	
Direct Payments	F = C+D+E	\$361,833	\$0	\$0	\$250,000	\$0	\$611,833	Donors direc
Total SRF Raised	G = A+F	\$381,833	\$382,888	\$590,087	\$1,607,074	\$2,144,228	\$5,106,110	
Total SRF Spent	H = B+F	\$361,833	\$52,910	\$225,407	\$1,124,679	\$1,192,705	\$2,957,534	
Spend	H/G	94.8%	13.8%	38.2%	70.0%	55.6%	57.9%	

\$51,701

\$51,701

13.50%

\$255,000

\$306,701

80.10%

\$0

\$0

0

\$51,758

\$51,758

8.77%

\$84,500

\$136,258

23.09%

\$0

\$0

\$209,317

\$209,317

13.02%

\$51,079

\$250,000

\$510,396

31.76%

\$0

\$0

\$175,000

\$175,000

\$233,006

\$603,006

195000

28.12%

8.16%

\$0

\$507,776

\$111,833

\$619,610

\$695,000

37.96%

\$1,938,195

12.13%

\$623,585 Conservative

0 Need to find

62.

\$20,000

\$111,833

\$131,833

\$250,000

\$381,833

100.00%

34.53%

С

K = I + J + C

K/G

M = D + E

N = K + L + M

N/G

Founders Gifts to SRF

Founders Gifts via other

Founders Direct giving

**Total Founder Spend** 

Founders Soft Credits

Founder Direct Donors

**Total Founder Impact** 

% SRF Revenue

% SRF Revenue