WHATEVER YOU CAN DO, or dream you can, begin it. Boldness has genius, power and magic in it.

- JOHANN WOLFGANG VON GOETHE

SYNGAP RESEARCH FUND

Collaboration. Transparency. Urgency.

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 &



Professional background in global development, healthcare strategy, finance



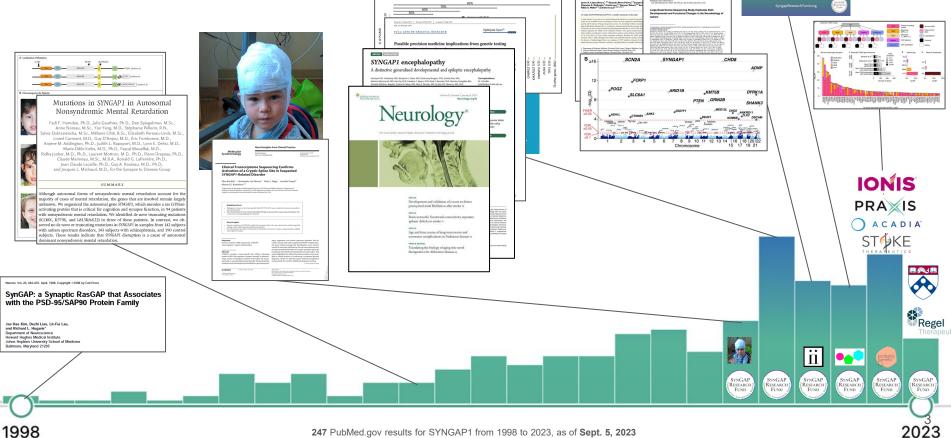
Educational background in Mathematics (BS), International Economics (MA) and Finance (MBA).







SYNGAP1 Timeline



BMC

C Distribution of PosMD yield across genes

ICD-10 CODE for SYNGAP1 approved

F78.A1

IN

HHS Public Access

REPORT A catalogue of new incidence monogenic neurodevelopme

caused by de novo variants

It gets complicated fast - I have ~20 grants in flight today.

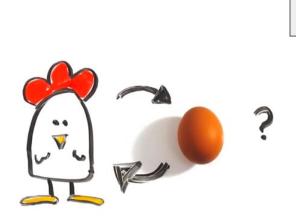
Year	Institution	Prof/Focus	Commitment	= Remaining +	Year	Institution	Prof/Focus	Commitment	= Remaining +
2018	Hopkins	Huganir	\$500,000	Fully Funded	2022	Rarebase	FM 38, 40, 41, 45	\$570,000	\$213,750
2018	Scripps	Rumbaugh	\$205,500	Fully Funded	2022	Hopkins	Coller	\$130,000	\$65,000
2018	Baylor	Holder	\$130,000	Fully Funded	2022	Edinburgh	Cobb/Kind	\$183,545	\$183,545
2019	UCSF	Lowenstein	\$10,000	Fully Funded	2022	USC	Quadrato	\$130,000	\$41,043
2019	Penn	Heller	\$130,000	Fully Funded	2022	Harvard/BCH/Axo	r Xin/Kadam	\$140,000	Fully Funded
2020	Ciitizen	Brimble	\$40,000	Fully Funded	2023	Cornell	Cunnane (Med Stu)	\$5,000	Fully Funded
2020	USC	Coba / Quadrato	\$46,500	Fully Funded	2023	Utah	Chow	\$65,377	Fully Funded
2020	JCU	Frazier	\$14,200	Fully Funded	2024	AES/CHOP	McKee	\$10,000	Fully Funded
2020	USC	Coba	\$130,000	Fully Funded	2023	Stanford	Knowles	\$130,000	\$65,000
				-	2023	JCU	Frazier	\$105,000	\$13,609
2021	Harvard	DSC	\$70,191	Fully Funded	2023	Turku	Postilla	\$100,000	\$50,000
2021	Harvard	Poduri	\$238,133	\$65,133	2023	Toronto	Andrade	\$156,380	\$78,190
2021	Rarebase	IPSC	\$63,750	Fully Funded	2023	Ottawa	Lacoste	\$25,000	\$15,000
2021	Combined Brain	IPSC	\$1,286	Fully Funded	2023	Cornell	Grinspan	\$100,000	\$100,000
2021	Rarebase	Function, round 1	\$150,000	Fully Funded	2023	NYU	Devinsky	\$50,000	\$50,000
2022	Canada Models	UBC & Montreal	\$19,672	Fully Funded	2023	Florey	Waters	\$7,000	\$7,000
2022	Nebraska	Zempleni	\$99,909	Fully Funded	2023	Jax	Simon	\$186,700	\$186,700
2022	Probably Genetic	Lukas Lange	\$15,600	Fully Funded	2023	Nebraska	Zempleni	\$196,672	\$196,672
2022	UC Davis	Joe Anderson	\$148,000	\$20,000	2024	UCSF	Willsey	\$130,000	\$130,000
2022	Fundacion NICE	Aledo	\$1,250	Fully Funded	2024	U. Ottawa	Lacoste	\$128,888	\$128,888
2022	Penn	MDBR	\$65,000	Fully Funded	2024	Edinburgh (UK)	Donlin-Asp	\$130,000	\$130,000
2022	Jackson Labs	TBD	\$42,700	\$15,647					
2022	Turku	Courtney	\$187,299	\$0	2024	Jax	Simon	\$186,700	\$186,700
2022	McGill	Bowie	\$115,000	\$58,388				\$5,290,252	\$2,000,265

Build community and leverage giving: 1:2:6

		2018	2019	2020	2021	2022	Total	Notes
990 Revenue (line 12)	A	\$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%	
Founders Gifts to SRF	I	\$20,000	\$51,701	\$51,758	\$209,317	\$175,000	\$507,776	
Founders Gifts via other	J	0	\$0	\$0	\$0	\$0	0	Need to find
Founders Direct giving	С	\$111,833	\$0	\$0	\$0	\$0	\$111,833	
Total Founder Spend	K = I + J + C	\$131,833	\$51,701	\$51,758	\$209,317	\$175,000	\$619,610	62.
% SRF Revenue	K/G	34.53%	13.50%	8.77%	13.02%	8.16%	12.13%	
Founders Soft Credits	L	0	\$255,000	\$84,500	\$51,079	\$233,006	\$623,585	Conservative
Founder Direct Donors	M = D+E	\$250,000	0	0	\$250,000	195000	\$695,000	
Total Founder Impact	N = K + L + M	\$381,833	\$306,701	\$136,258	\$510,396	\$603,006	\$1,938,195	
% SRF Revenue	N/G	100.00%	80.10%	23.09%	31.76%	28.12%	37.96%	

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...



Say yet to good work and get it going... grant agreements and hiring.

Approve Work

A guarantee fund allows you to move faster Raise against the project

With a motivated scientist and concrete project people will join you

Pay out from available funds Go to general fund first and then guarantee fund

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 Re	esearch Fun	d Incorpora	ated	83-1200789	9 Page 2					
Part II Support Schedule for						(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)	(a) 2018	(b) 2019	(c) 2020	(d) 2021	(e) 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.					

590,087. 1,364,391. 2,144,228.

4,501,594.

382,888.

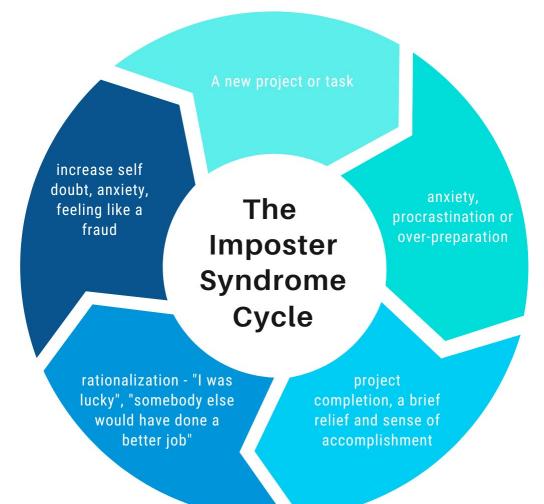
20,000.

Toy revenues lowing for the

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 selfsabotage.



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?



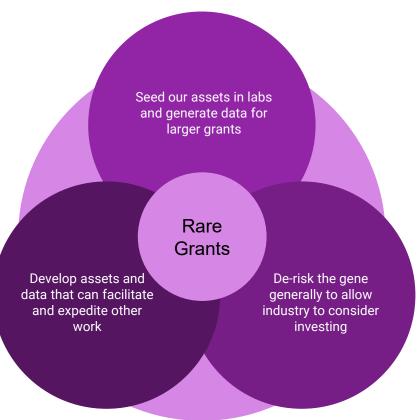
Our capital is rare - Seed, Risk tolerant & Catalytic

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	Prevalence	Gene	Size	Inher.		Onset	Mech.	Hist.	Mod.	Dev.	Org.	SZ	ID	MD	Need	Opp.	Disease Summary
Internal Development Candidates - Genetic Neurodevelopmental Disorders & Epileptic Syndromes																	
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		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
AN 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
Reft 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		<6 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
SLC8A 1-Related Disorder	20,603	SLO8A1	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	12,366	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

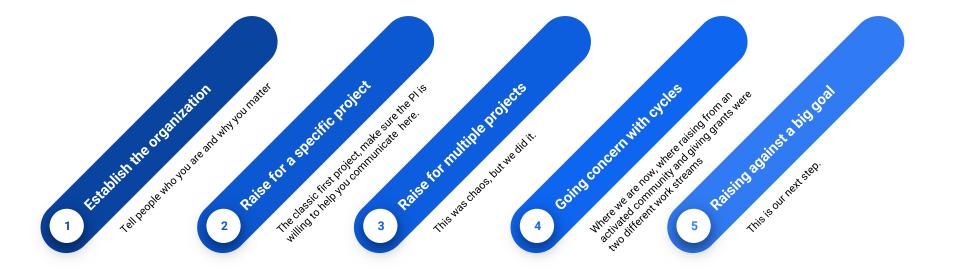
Language & culture matters: "We can fill an unmet need together" vs "I need to raise \$100k".

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.



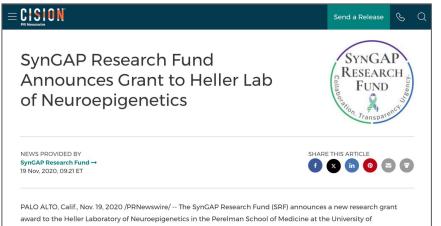
How you fundraise will change as you grow,



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.





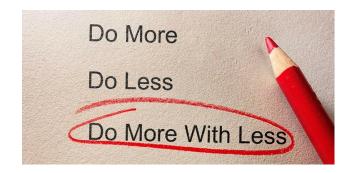
award to the Heller Laboratory of Neuroepigenetics in the Perelman School of Medicine at the University of Pennsylvania. The lab will receive \$130,000 over two years towards funding a postdoctoral fellow who will focus on epigenetic regulation of SynGAPI.

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.