UCLA David Geffen School of Medicine

Managing Underfunded and Overfunded PI's

Laura Sheehan
Manager of Research Administration, UCLA Dept. of Family Medicine

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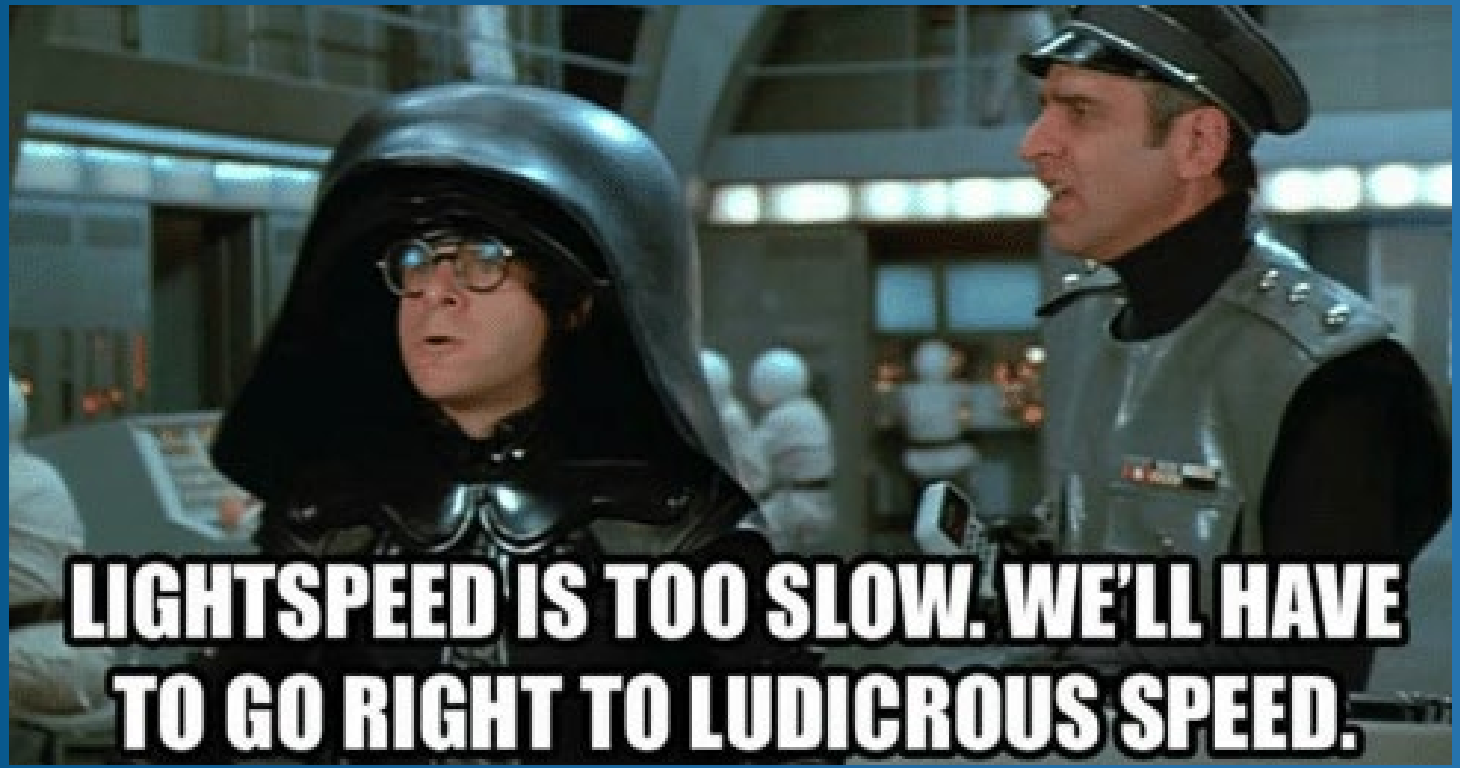
- Manager of Research Administration, Department of Family Medicine, David Geffen School of Medicine at UCLA
- 24 years in academic research administration
  - 3 years in Civil/Environmental Engineering research administration at University of Southern California (USC)
  - 10 years in Pediatric Infectious Diseases research and fellowship administration, and divisional financial management at UCLA
  - 11 years in Family Medicine research administration and financial management at UCLA
- Management of approximately $10M in contract and grant funding annually
- Department consistently ranks in top 10 nationwide for federal funding among all Family Medicine Departments

Main Objectives

- Identify common causes leading to overfunding and underfunding of researchers
- Determine most appropriate solutions to manage underfunded/overfunded scenarios


LIGHTSPEED IS TOO SLOW. WE'LL HAVE
TO GO RIGHT TO LUDICROUS SPEED.

A good solution requires a good understanding of the problem

Root Cause Analysis

1. Realize the problem — Hanks
2. Gather data — Holmes
3. Determine possible causal factors — Toddler
4. Identify root cause — Swift
5. Recommend and implement solutions — Starlord

1. Realize the problem

Hanks

2. Gather Data

Holmes

3. Determine possible causal factors

Toddler

4. Identify the root cause

Swift

5. Recommend and implement solutions

Starlord

Real Life Scenarios – UNDERFUNDED PI's

Dr. Uma

Dr. Susan

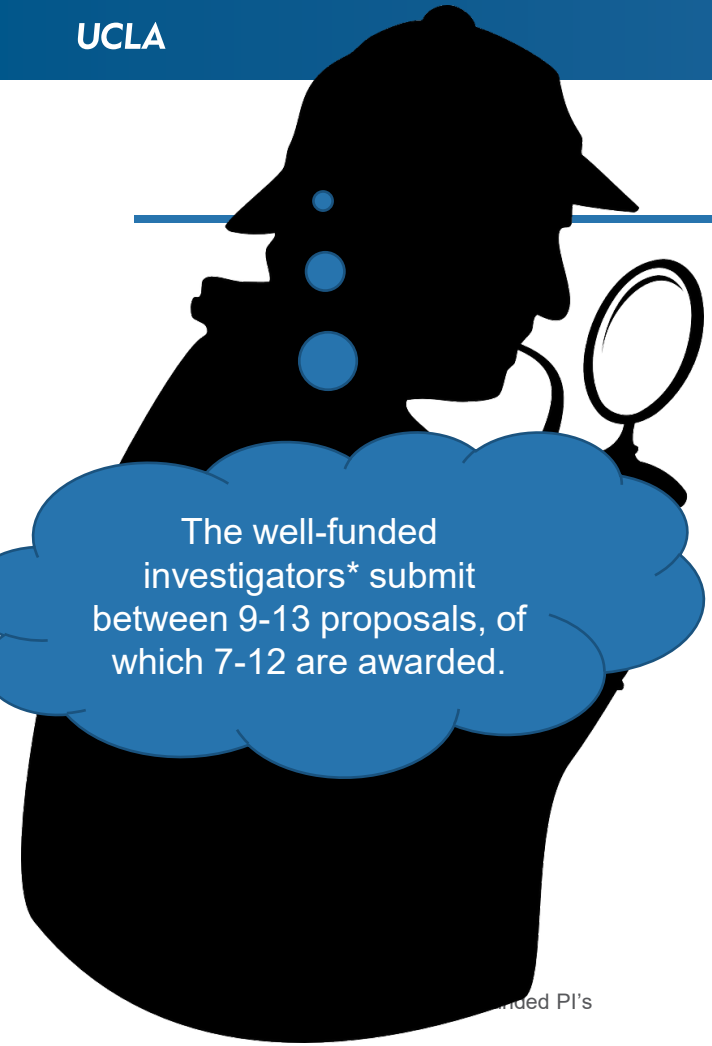
Dr. Owen

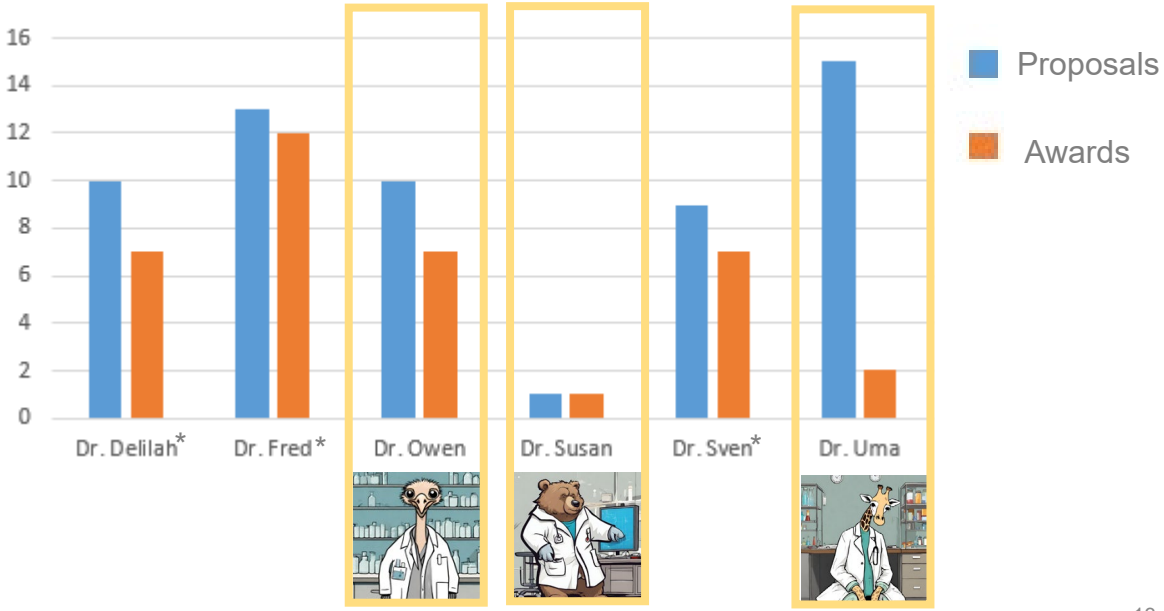
These researchers do not have enough research funding.

Houston, we have a problem.

The game is afoot….

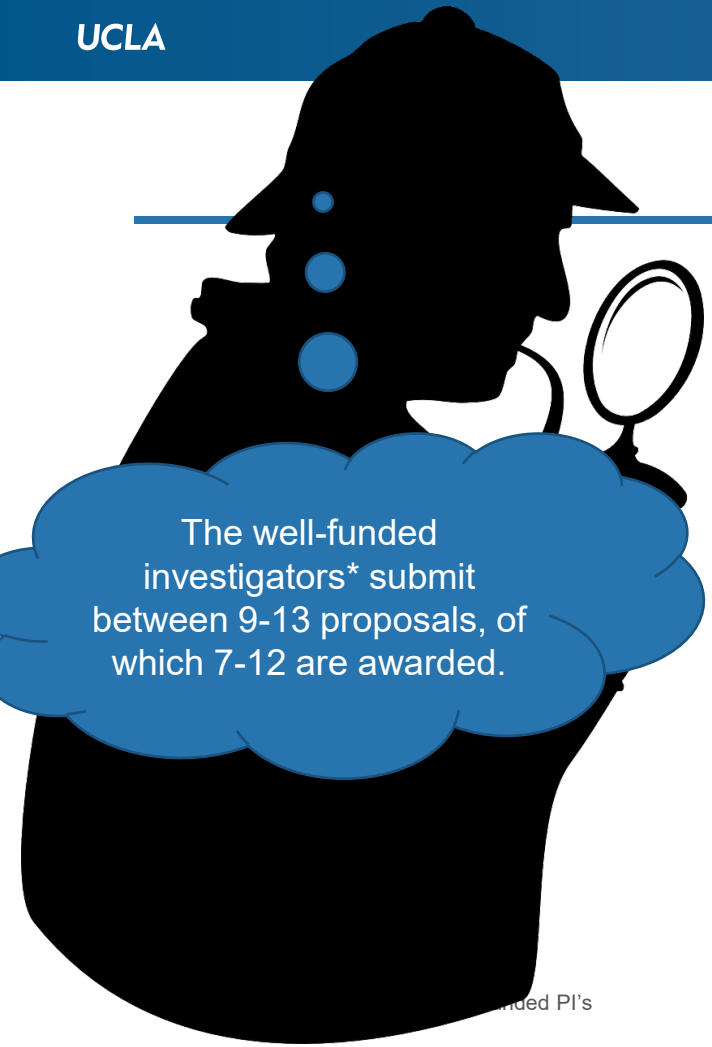
Time to gather that data!

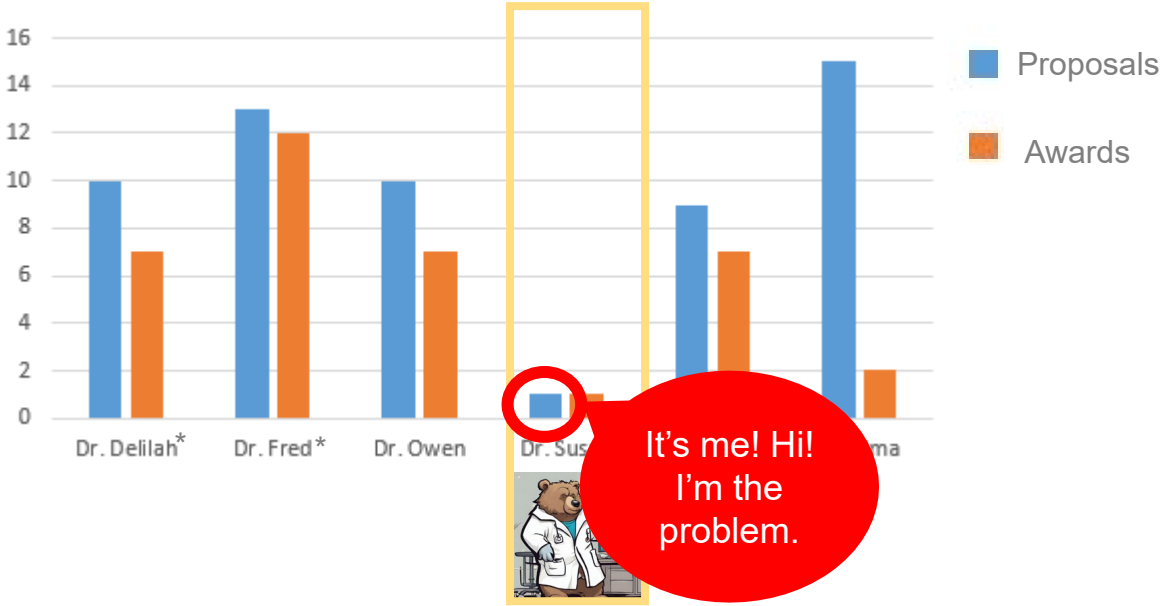




The game i

Time to gathe





Not Submitting Susan

Meet with PI to get more information

- Is she aware of the problem, or is this a surprise?
- Does she have enough administrative support?
- Enough protected time to dedicate to proposal writing?
- Is she having a hard time finding funding opportunities?
- Writer's block? Not sure what to research?
- Is she overwhelmed with work or other commitments?
- Is she being lazy?

We can't move to the next step until we have answers!

Let’s do this!

- Black: SOP, best practice even for non-problematic PI’s, Plan A

- Red: Recurring issues, no improvement, time to bring in the big guns, Plan B

Action Plan for Not Submitting Susan – Plan A

I'm too overwhelmed to lead a new project!

- Include long-term projections during fiscal review meetings
- Provide reminders to seek new funding during last 1-2 years of existing projects

- Subscribe her to funding opportunity newsletters, provide regular updates regarding available funding announcements
- Schedule meeting with Vice Chair of Research/mentor to discuss opportunities and obstacles

- Encourage her to collaborate with colleagues

Action Plan for Not Submitting Susan – Plan B

If there is no improvement:

- Schedule meeting to discuss why this is problematic:
  - Puts burden on Department/Institution to cover gaps in salary
  - Unfair to research personnel (layoffs, contract terminations, etc.)
  - Unfair to other research faculty who are putting in the work
  - Inconsistent with her responsibilities as research faculty member
- Ask for regular updates (in writing) regarding actions she is taking to seek funding
- Ask Chair/Leadership to intervene
- Threaten salary reduction
- Reduce salary

Real Life Scenarios – UNDERFUNDED PI's

Dr. Uma

Dr. Susan

Dr. Owen

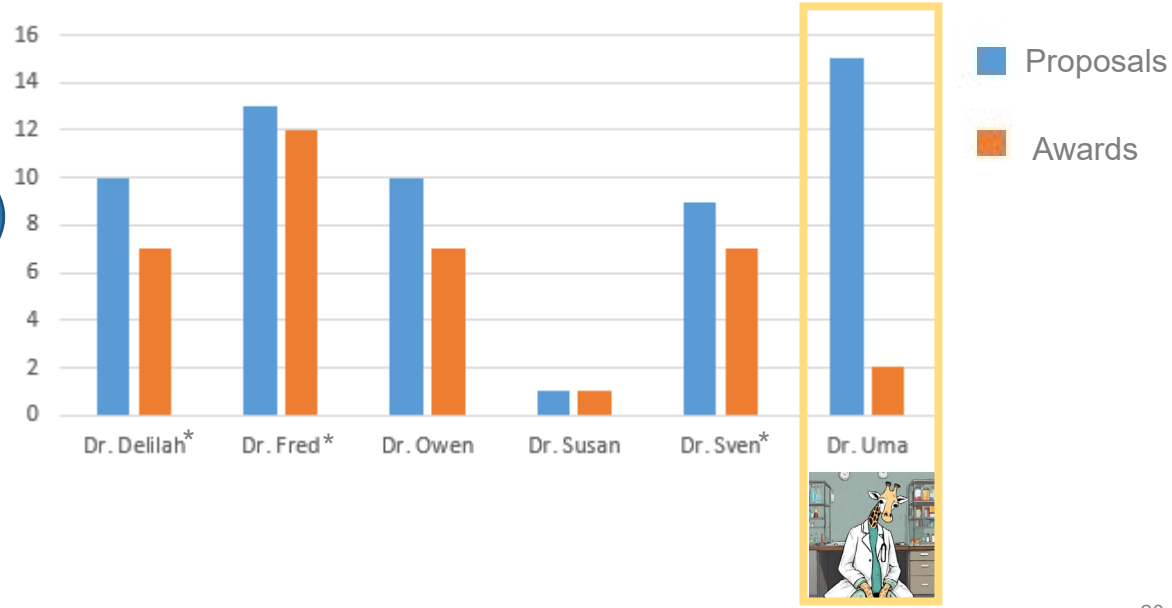
These researchers do not have enough research funding.

Houston, we have a problem.

The game is afoot….

Time to gather that data!

The well-funded investigators* submit between 9-13 proposals, of which 7-12 are awarded.



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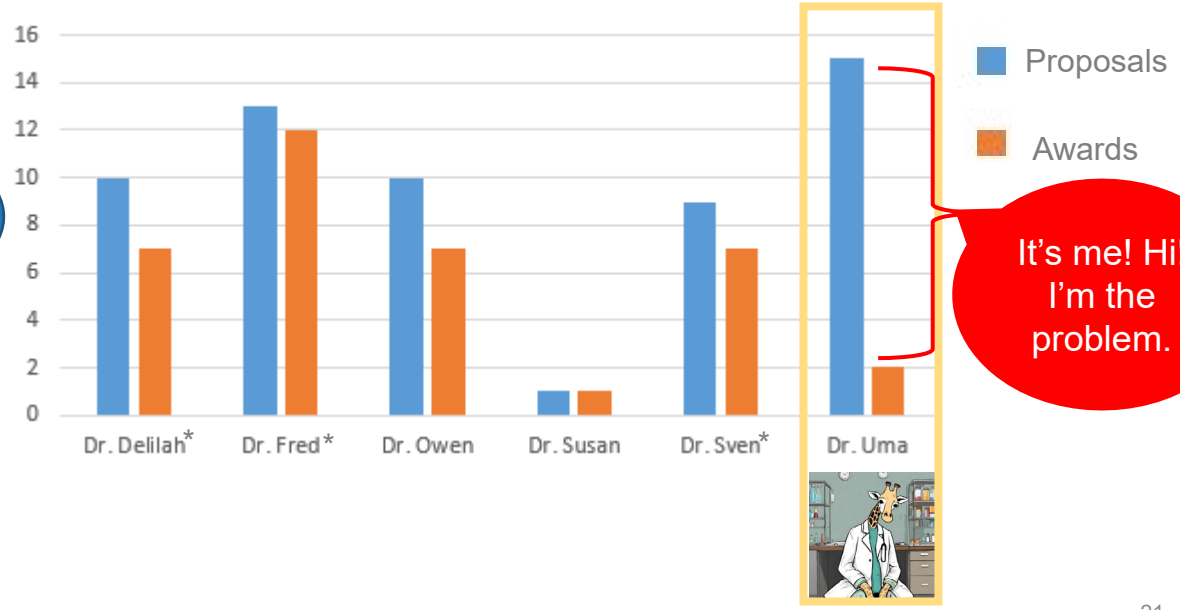

Unsuccessful Uma

Review prior submissions

- Is she applying to the appropriate sponsor or opportunity for the research being proposed?
- Is she following sponsor guidelines?
- What areas are receiving low scores?
- Are there any common themes in reviewer comments?
- Is she only applying for highly competitive opportunities?

Action Plan for Unsuccessful Uma – Plan A

- Help find sponsors whose interests align with her research interests
- Provide or refer to training in proposal basics
- Provide additional administrative support/review for future proposals
- Schedule meeting with Vice Chair of Research/mentor to discuss opportunities and obstacles
- Compile and analyze reviewer comments to identify common/repeated themes and areas of weakness
- Encourage pilot proposals or smaller projects
- Seek bridge funding, if available

Action Plan for Unsuccessful Uma – Plan A

SIGNIFICANCE: Get passionate, convince reviewers your research is essential/fascinating

INNOVATION: Where are the gaps and how will your research fill them?

FEASIBILITY: Scope/size must be achievable

TEAM: Identify weaknesses in both expertise and availability. Ensure effort is sufficient to achieve aims. Expand team as needed.

Action Plan for Unsuccessful Uma – Plan B

If there is no improvement:

- Send for more in-depth proposal training
- Connect with a more senior faculty member or Vice Chair for mentorship
- Be on the lookout for signs of exhaustion, feelings of frustration or futility (can lead to retention issues if not addressed)
- Ask Chair/leadership to discuss course of action/options
- Ask her to consider other fields of research/foci

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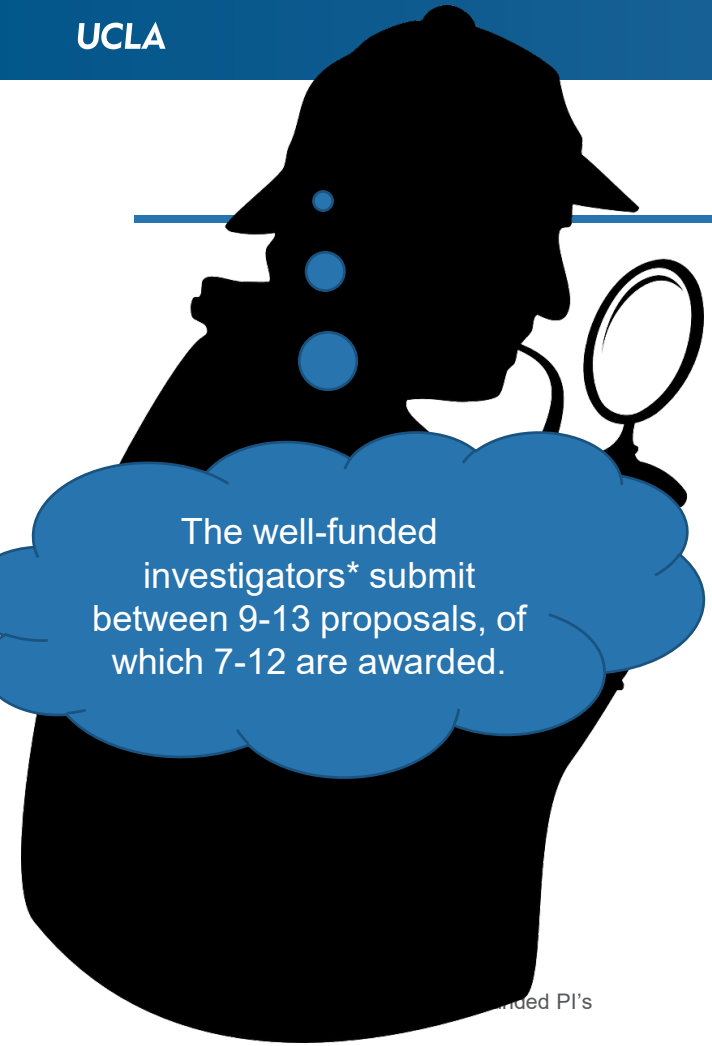

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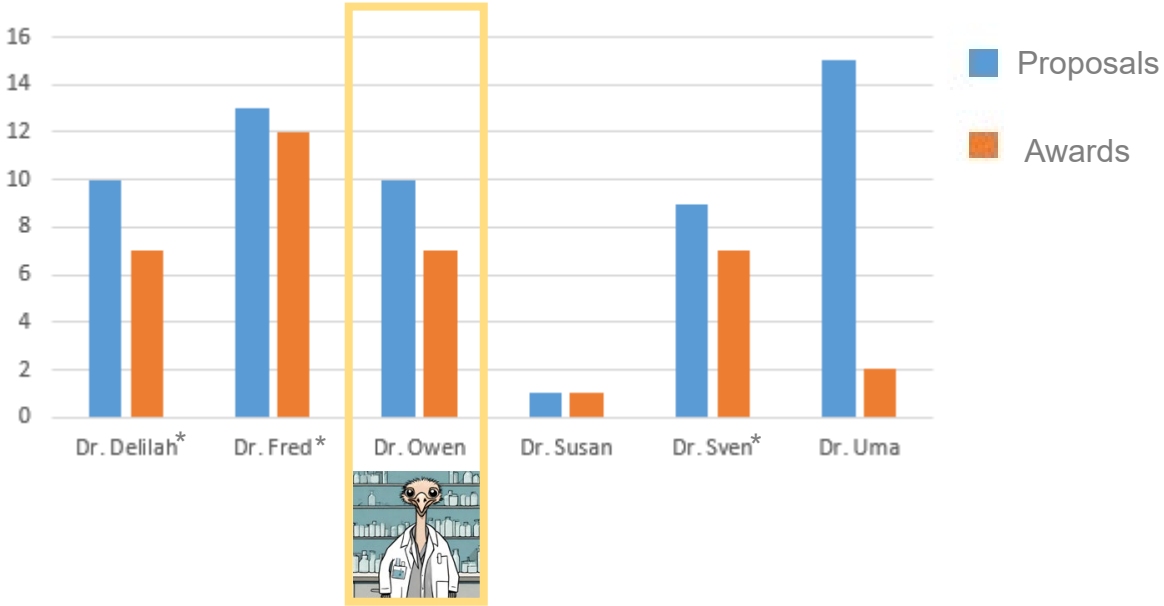

We need more data!

The well-funded investigators* are awarded between $250k and $650k .

Investigator	Awarded	Expenses	Balance
Dr. Uma	$ 45,000	$ 40,000	$ 5,000
Dr. Susan	$ 25,000	$ 23,000	$ 2,000
Dr. Owen	$ 250,000	$ 265,000	$ (15,000)
Dr. Fred*	$ 650,000	$ 425,000	$ 225,000
Dr. Sven*	$ 250,000	$ 35,000	$ 215,000
Dr. Delilah*	$ 275,000	$ 75,000	$ 200,000

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Dr. Delilah*		00	$ 200,000

It's me! Hi! I'm the problem.

Over-Spending Owen

Review spending, compare with budget

- Is the overspend due to larger than anticipated costs? Or is he charging inapplicable/unallowable expenses?
- Is he claiming more effort than originally budgeted? If yes, is that overage justifiable or does it not jive with the stated scope of work?
- Is this a case of poor planning or unethical expenditures?

Action Plan for Over-Spending Owen – Plan A

- Provide or refer to training in post-award management basics
- Provide additional administrative support for monitoring spending
- Work with him to develop an appropriate spending plan (and document everything!)
- Mandate recurring monthly meeting with fund manager to monitor spending and burn rate
- Encourage him to seek additional sources of funding
- Schedule meeting to discuss why this is problematic:
  - Audit risk
  - Unethical
  - Puts future funding at risk
  - Risk of not having funds for future expenses

Action Plan for Over-Spending Owen – Plan B

If there is no improvement:

- Send for more in-depth post-award training
- Institute new purchasing process that requires additional approvals before expenses can be incurred
- Institute mandatory extra review/scrutiny of outgoing proposals to ensure adequate funds are being requested
- Ask Chair/leadership to intervene
- If behavior is unethical: REPORT

Real Life Scenarios – OVERFUNDED PI's

Dr. Sven

Dr. Fred

Dr. Delilah

These researchers have too much research funding.

Houston, we have a problem.

Let's look at the data…

Investigator	Awarded	Expenses	Balan
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Frequently requests NCEs

History of trying to squeeze in an entire year's worth of expenses onto the ledger at the last minute

Let's look at the data…

Investigator	Awarded	Expenses	Balan
Dr. Ur		40,000	$
Dr. Su		23,000	
Dr. Ov		265,000	
Dr. Fred*	$ 650,000	$ 425,000	225,000
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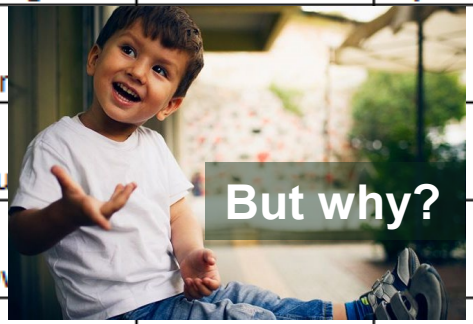


Frequently requests NCEs

History of trying to squeeze in an worth nto ne

It's me! Hi! I'm the problem.

Not-Spending Sven

Review spending, compare with budget

- Personnel: Turnover? Need to hire new? Not enough effort being charged?
- Did he over-budget in the proposal? Poor fiscal forecasting or deliberately inflated projected costs?
- Change in scope?
- Delays?
- Distracted by other projects?

Action Plan for Not-Spending Sven – Plan A

- Mandate recurring monthly meeting with fund manager to monitor spending and burn rate
- Provide additional administrative support for monitoring spending; send reminders about deliverables/deadlines
- Work with him to develop an appropriate spending plan, review best practices for accurate proposal budgeting (document everything!)
- Schedule meeting to discuss why this is problematic:
  - Audit risk
  - Delays research
  - Puts future funding at risk
  - Out of compliance with sponsor terms

Action Plan for Not-Spending Sven – Plan A

- Address personnel issues
  - New hires: provide him with or connect him to resources for writing job descriptions, posting, interviewing, hiring, and training
  - Turnover: provide him with or refer him to management training, appoint a staff manager, or request guidance from leadership to address
  - Encourage collaborations with other investigators/teams

Action Plan for Not-Spending Sven – Plan B

If there is no improvement:

- Provide repeated, comprehensive warnings about deadlines, deliverables, and responsibilities IN WRITING
- Restrict future proposals until he starts spending current awards appropriately
- Sponsor may demand return of unspent funds or refuse to award more; do not take extreme measures to avoid this (failure is often the best teacher)
- Ensure Chair/Leadership is informed and aware; ask them to intercede as needed

Real Life Scenarios – OVERFUNDED PI's

Dr. Sven

Dr. Fred

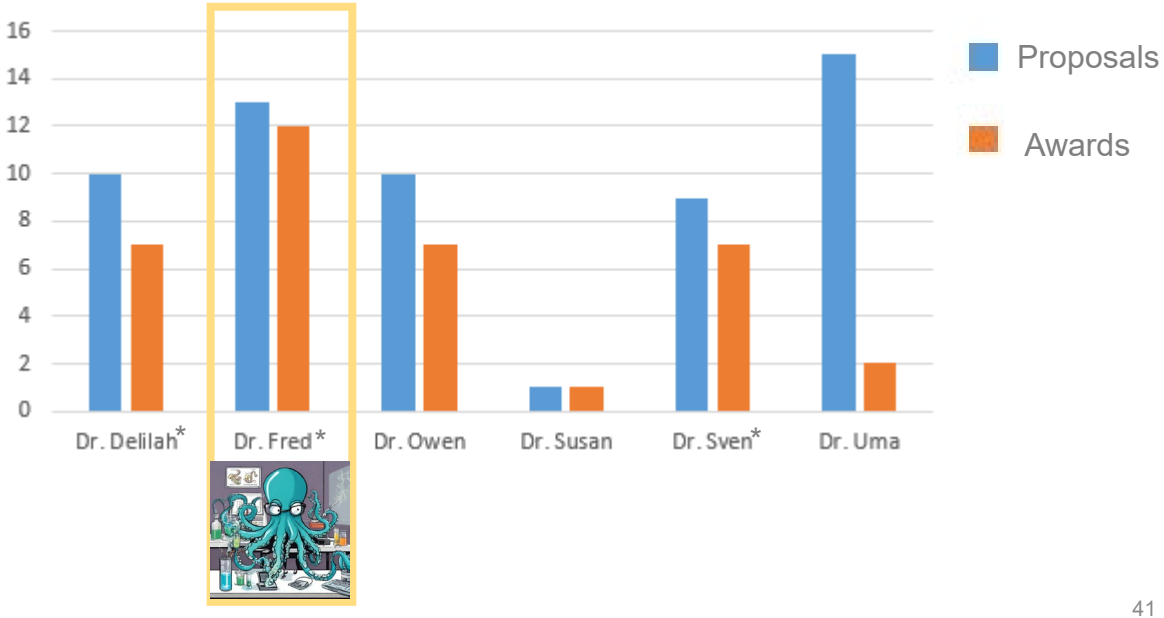
Dr. Delilah

These researchers have too much research funding.

Houston, we have a problem.

Let's look at the data…

He is submitting a lot of proposals and has an excellent success rate…



Let's look at the data…

He is receiving a lot of research funding and his burn rate is fairly good, but not great…

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Let's look at the data…

He is appropriately spending down in all categories, EXCEPT…

Dr. Fred's Awards

	His Effort			Other Personnel			Materials			Travel		
Project	Awarded	Expenses	**Balance**	Awarded	Expenses	**Balance**	Awarded	Expenses	**Balance**	Awarded	Expenses	**Balance**
Project A	55,000	28,000	27,000	150,000	140,000	10,000	50,000	48,000	2,000	5,000	5,000	-
Project B	28,000	15,000	13,000	245,000	240,000	5,000	25,000	22,500	2,500	10,000	10,000	-
Project C	15,000	-	15,000	45,000	45,000	-	8,000	7,800	200	800	800	-
Project D	76,000	12,000	64,000	78,000	78,000	-	12,000	12,000	-	1,000	900	100
Project E	49,000	15,000	34,000	100,000	96,000	4,000	15,000	13,500	1,500	3,000	2,800	200
Project F	43,000	20,000	23,000	120,000	118,000	2,000	10,000	10,000	-	2,000	2,000	-
Totals			**176,000**			**21,000**			**6,200**			**300**

Let's look at the data…

He is appropriately spending down in all categories, EXCEPT…

He is dedicating effort without pay on many projects

His Other Support pages are complex and often rejected for being over 12 months

Dr. Fred's Awards

	His Effort			Other Personnel								
Project	Awarded	Expenses	**Balance**	Awarded	Expenses	**Balance**	Awa					
Project A	55,000	28,000	27,000	150,000	140,000	10,000	50,000	48,000	2,000			
B	28,000	15,000	13,000	245,000	240,000	5,000	25,000	22,500	2,500	10,000	10,000	
C	15,000	-	15,000	45,000			8,000	7,800	200	800	800	-
D	76,000	12,000	64,000	78,0			12,000	12,000	-	1,000	900	100
E	49,000	15,000	34,000	100,			15,000	13,500	1,500	3,000	2,800	200
F	43,000	20,000	23,000	12			10,000	10,000	-	2,000	2,000	-
			176,000			0			**6,200**			**300**

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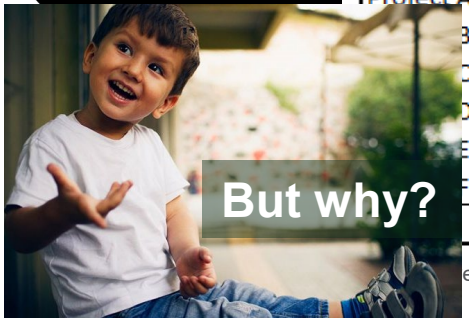

erfunded PI's

Over-funded Fred

Is it good luck, or are there contributing factors?

- Is he submitting too many proposals? Agreeing to be Co-I on too many collaborative projects?
- Is he over-budgeting how much effort is needed on projects, or is it the quantity of projects that is the problem?
- Are the projects being accomplished in a timely manner? Or are deliverables delayed?
- Is he able to dedicate the time needed to do quality work?

Action Plan for Overfunded Fred – Plan A

- Utilize long-term projections to determine when additional funding should (and should not) be sought
- Encourage them to expand their team (and thereby reduce their own effort/responsibilities)
- Ensure they have enough administrative (and research) support to meet deliverable expectations
- Schedule meeting to discuss why this is problematic:
  - Audit risk
  - Delays research
  - Complicates effort reporting and OS management
  - Potential loss of funding

Action Plan for Overfunded Fred – Plan A

- To manage effort, create an internal spreadsheet that breaks effort down by:
  - Total monthly effort
  - Total budget-period effort for each individual project
- Be sure to include the budgeted amount and minimal amount allowable
- Include calendar month effort to make it easy to transfer information to Other Support pages
- Review this regularly, preferably during your monthly meetings between the PI and fund manager

Sample Monthly Effort Distribution Plan

Joe Schmoe - Monthly Effort Distribution

Project	Grant #	Fund #	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21
COMP - Clincal Effort		62260	25.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
U01 ZYZ Proj (NCE)	U01XX12345	30901	14.8%	5.0%	5.0%	0.0%	3.0%	3.0%	5.0%	5.0%	5.0%	5.0%	3.0%	3.0%	0.0%	0.0%	0.0%	end							
R01 YYY Award	R01YY34567	30907	36.7%	46.0%	11.0%	30.0%	30.0%	25.0%	15.0%	15.0%	10.0%	15.0%	17.0%	17.0%	15.0%	20.0%	0.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	20.0%
BBB Study	R01AB01234	79391	0.8%	10.0%	45.0%	30.0%	27.0%	32.0%	40.0%	40.0%	45.0%	40.0%	55.0%	55.0%	45.0%	20.0%	20.0%	10.0%	10.0%	10.0%	25.0%	25.0%	25.0%	25.0%	end
CCC Project	R24ZZ98765	81874	22.5%	19.0%	19.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	5.0%	5.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	10.0%	10.0%	10.0%	10.0%	10.0%
New WWW Study	*R01WW67890*	*TBD*													*start*	20.0%	20.0%	20.0%	20.0%	20.0%	15.0%	15.0%	15.0%	15.0%	25.0%
New ABC Study	*R01GM112233*	*TBD*														*start*	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	25.0%
Monthly Total			**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Project	Budget Period	Budget Period Effort	Min Effort Allowable	Effort Budgeted
COMP - Clincal Effort	7/1/19-6/31/20	20.0%	20.0%	20.0%
U01 ZYZ Proj (NCE)	9/1/19-8/31/20	2.7%	0.0%	8.0%
R01 YYY Award	9/1/19-8/31/20	17.4%	15.0%	20.0%
BBB Study	4/1/19-3/31/20	26.7%	26.3%	35.0%
CCC Project	6/1/19-5/31/20	17.5%	15.0%	20.0%

< NCE, no prior approval req to reduce effort

Project	Budget Period	Budget Period Effort	Min Effort Allowable	Effort Budgeted
COMP - Clincal Effort	7/1/20-6/30/21	20.0%	20.0%	20.0%
R01 YYY Award	9/1/20-8/31/20	15.0%	15.0%	20.0%
BBB Study	4/1/20-3/31/21	27.1%	26.3%	35.0%
CCC Project	6/1/20-5/31/21	15.0%	15.0%	20.0%
New WWW Study	*7/1/20-6/30/20*	*19.6%*	*18.8%*	*25.0%*
New ABC Study	*8/1/20-7/31/21*	*22.1%*	*22.5%*	*30.0%*

!

Action Plan for Overfunded Fred – Plan B

If there is no improvement:

- Request permission from sponsor(s) to reduce effort beyond allowable limits
- Request NCE's as needed to accomplish all deliverables
- Consider dedicating effort without pay for future proposals (if appropriate)
- Ask them to say no to future projects until they have existing projects under control
- Ask Chair/Leadership to not approve future proposals if needed

Real Life Scenarios – OVERFUNDED PI's

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Dr. Fred

Dr. Delilah

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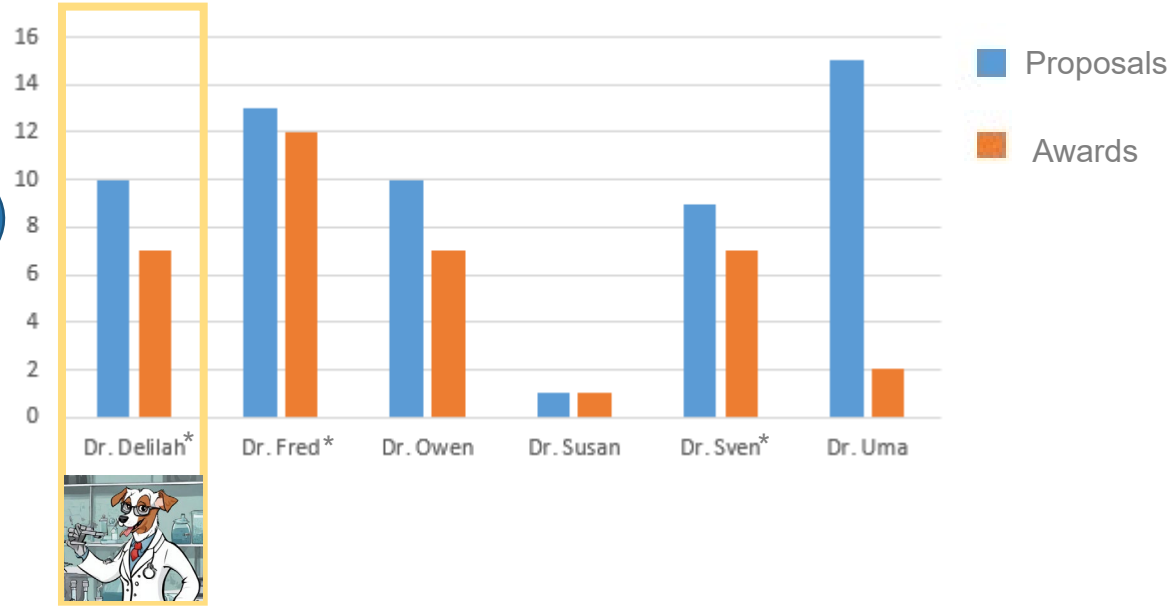
Let's look at the data…

She is submitting an average number of proposals and has an average success rate…



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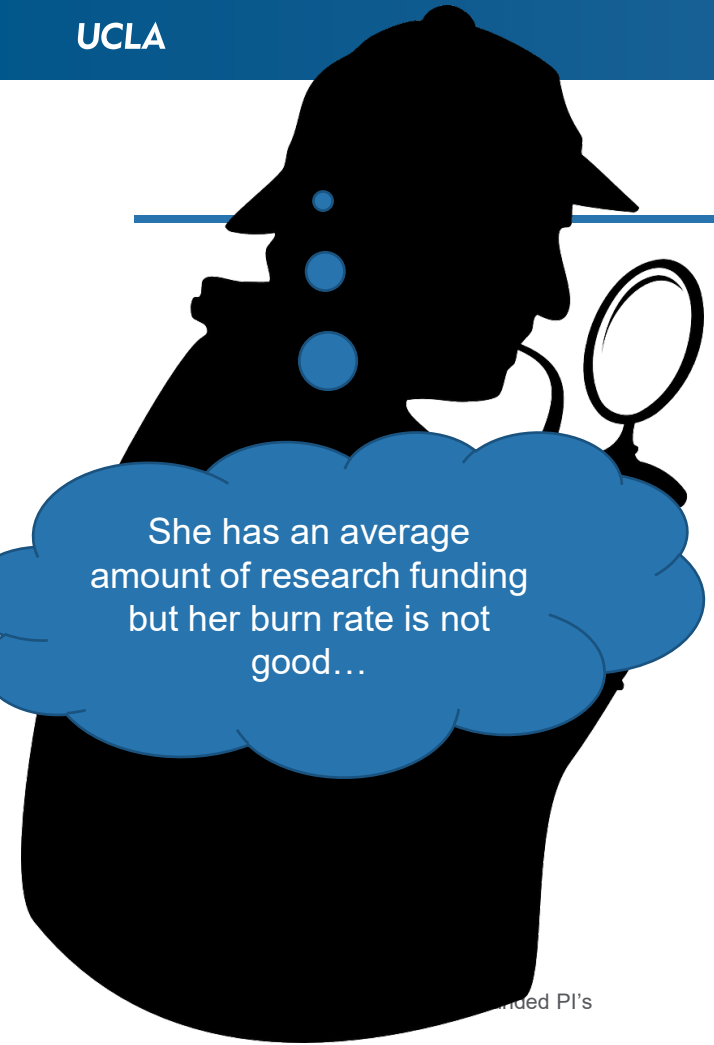

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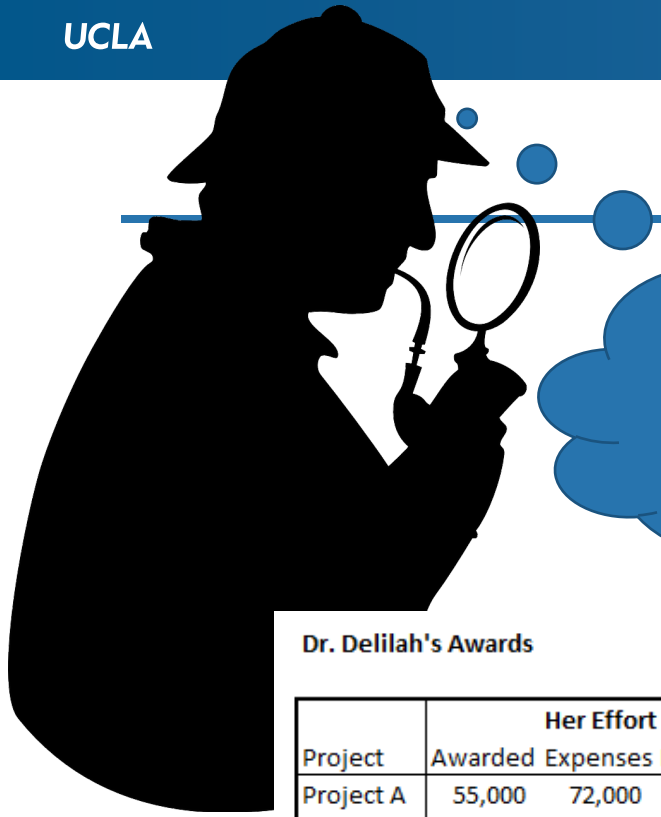
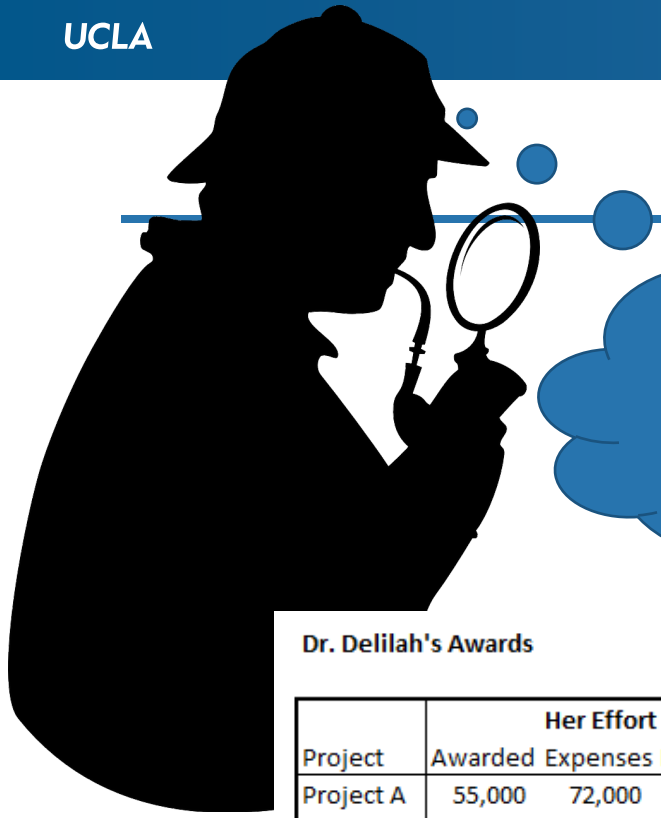


She is over-spending for her own effort, and underspending drastically in Other Personnel…

Dr. Delilah's Awards

	Her Effort			Other Personnel			Materials			Travel		
Project	Awarded	Expenses	**Balance**	Awarded	Expenses	**Balance**	Awarded	Expenses	**Balance**	Awarded	Expenses	**Balance**
Project A	55,000	72,000	(17,000)	150,000	95,000	55,000	50,000	48,000	2,000	5,000	5,000	-
Project B	28,000	33,000	(5,000)	245,000	180,000	65,000	25,000	22,500	2,500	10,000	10,000	-
Project C	15,000	18,000	(3,000)	45,000	28,000	17,000	8,000	7,800	200	800	800	-
Project D	76,000	82,000	(6,000)	78,000	14,000	64,000	12,000	12,000	-	1,000	900	100
Totals			**(31,000)**			**201,000**			**4,700**			**100**



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Project A	55,000	72,000	(17,000)	150,000	95,000	55,000	50,000	[illegible]	[illegible]	5,000	5,000	-
Project B	28,000	33,000	(5,000)	245,000	180,000	65,000	25,000	[illegible]	[illegible]	[illegible],000	10,000	-
Project C	15,000	18,000	(3,000)	45,000	28,000	17,000	8,000	[illegible]	[illegible]	[illegible]800	800	-
Project D	76,000	82,000	(6,000)	[illegible]	[illegible]	64,000	12,00[illegible]	[illegible]	[illegible]	[illegible],000	900	100
Totals			**(31,000)**			**201,000**						**100**

It's me! Hi! I'm the problem.

Won’t Delegate Delilah

Meet with PI to get more information

- Is she having difficulty hiring staff? Retaining staff?
- Is she not delegating properly?
- How are her collaborations with other key personnel/investigators? Are they dropping out of her studies? Do they work with her once, but never again?
- Is she over-budgeting how much effort is needed for other personnel?
- Are the projects being accomplished in a timely manner? Or are deliverables delayed?

Action Plan for Won't Delegate Delilah – Plan A

- Mandate recurring monthly meeting with fund manager to monitor spending and burn rate
- Work with her to develop an appropriate spending plan (document everything!)
- Review best practices for accurate proposal budgeting (document everything!)
- Encourage collaborations with other Investigators
- Provide or refer to additional training on staff management, motivation, and delegating
- Provide or request additional support for hiring new personnel

Action Plan for Won't Delegate Delilah – Plan B

If there is no improvement:

- Request permission from sponsor(s) to increase effort beyond allowable limits/re-budget from other personnel
- Request NCE's as needed to accomplish all deliverables
- Mandate management training if staff turnover is the main cause. If no improvement: Remove managerial responsibilities and institute an in-between supervisor
- Ask them to say no to future projects until they have existing projects under control
- Ask Chair/Leadership to intervene as needed

INFORMATION

Training

- Managerial and Leadership Skills
- Creativity and Innovation
- Effective Communication
- Developing Others, Coaching for Improvement, Employee Engagement
- Building Effective Partnerships
- Financial Basics, Post-Award Management
- Preparing Proposals, Budgeting
- Managing Multiple Projects, Prioritization
- Mindfulness and Resilience
- Delegation, Giving/Receiving Feedback, Motivating Others
- Ethical Decision Making
- Hiring Personnel, Job Descriptions, Interviewing Skills

Unsuccessful Uma

Tips and Takeaways

- Determine CAUSE of undesirable behaviors and address that first
- Critique behavior, not the person
- Consider hiring new personnel or training existing personnel to help fill in gaps/weaknesses
- Take advantage of existing training resources (institutional courses, NIH, LinkedIn Learning, Khan Academy, Skillshare)
- Create your own training as needed
- Document everything

Thank You

Special thanks to *Space Balls*, Tom Hanks, *Apollo 13*, Sherlock Holmes, Robert Downey Jr, iStock Photos and the cute toddler, Taylor Swift, Star-Lord and Rocket, Canva (for the totally-not creepy AI-generated cartoons), that girl drinking from a fire hose, SRAI for having me, and all of you for joining me today.