

UNIVERSITY of CALIFORNIA, SAN DIEGO SCHOOL OF MEDICINE



Improving project management and tracking in bioinformatics cores

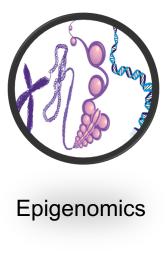
Brin Rosenthal, PhD

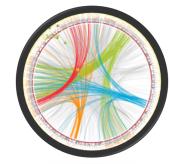
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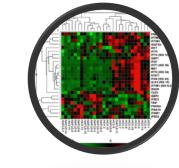


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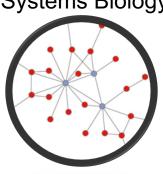


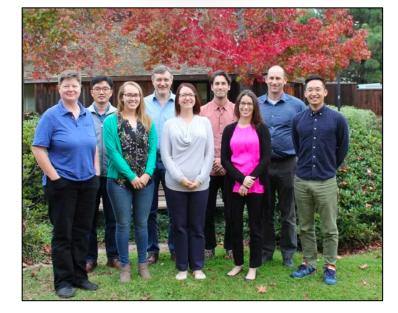
Whole Genome Analysis



Gene Expression & Regulation

Networks & Systems Biology





Biomarkers & Therapeutic Targets



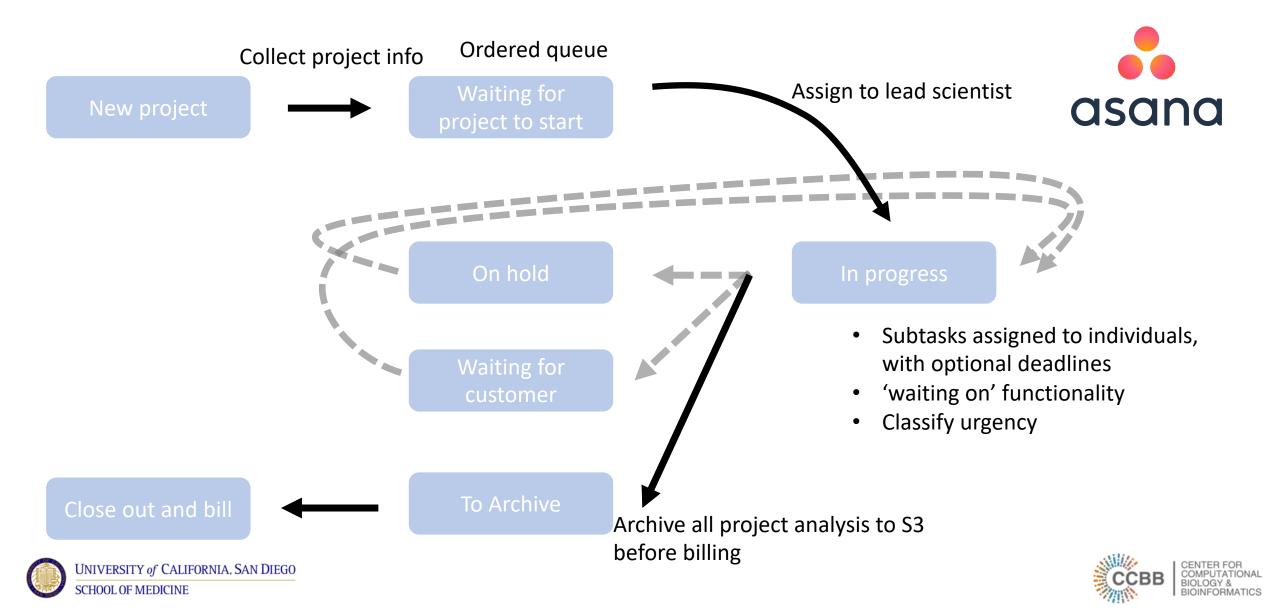
Collaborative, complex projects

- The challenges:
 - Growing team (grew from 4 to 7 scientists/ engineers), with diverse areas of expertise.
 - Larger number of projects in various stages of completion (currently 33)
 - Increase of large collaborative projects requiring input across the team.
 - Long-term projects which go 'on hold' for many months at a time, then resurface with 'urgent' requests (e.g. manuscript reviews).
 - Estimating how long each project will take





Harnessing project management tools to help



▼ In Progress

	20190612 ER stress in PERK mutant cell lines vs control	Assignm	High	In Pro	AN >		
	20190403 labcontrol software	Assignm	_	In Pro	() >		
	20190604 ishoshani WGS mouse tumorigenesis structural variation	Assignm	Medi	In Pro	AM >		
	20190612 PD-PDD-DLB blood differential methylation	Assignm Jul 31	High	In Pro	AN >		
	20190618 liver and lung myofibroblasts RNASeq	Assignm	_	In Pro			
	20190502 NAFLD associations	Assignm CTRI	High	In Pro			
	20190130 objective 2 alzheimers drug disease interactions	Assignm	Medi	In Pro			
	20181203 pmics integration and TCGA validation	Assignm	Medi	In Pro			
	FRIBC030 - Lithium response bipolar GWAS and network analysis	Assignm	Low	In Pro			
	20181003 metabolomics and network analysis	Assignm	Low	In Pro			
	20180928 HSC single cell	Assignm	Low	In Pro			
	20190502 novel HNF1A target transcripts	Assignm CTRI	Medi	In Pro			
	20190705 circadian rhythm in alzheimers	Assignm	High	In Pro	🧐 >		
	20190520 cord blood ADAR1 knockdown scRNAseq	Assignm	Medi	In Pro	🧐 >		
	MPN project	placehol	High	In Pro	W >		
UNIVER!	Cord blood editing project	placehol	Medi	In Pro	ССВ		

BB CENTER FOR COMPUTATIONAL BIOLOGY & BIOINFORMATICS



- Toggl allows for easy tracking of time spent on each project/ subtask
- Integrates with Asana, so projects in Asana also exist in Toggl, and are updated accordingly
- Projects can be billable or unbillable
- Generates reports about how far along in the project
- Enables more realistic estimates for future projects





Example report from toggl

 Estimation Tracked \$ Billable \$ Non-billable 	115 125h 44 min 119h 00 min 6h 44 min		 Non-billable Billable 	25h 44 min
Task ^Y		Assignee ^	Estimation ~~	Percentage
Individual level netwo	ork analysis: 15-25 hours	Everyone	17.79 of 25 h	71 %
Integrative network a 20 hours	nalysis with holdouts: 10-	Everyone	13.45 of 20 h	67 %
TCGA data integration	n wrap up 20181203 ation and TCGA validation	Everyone	10.51 of 10 h	105 %
TCGA HPV positive or network analysis 201 integration and TCGA	opharynx tumor validation 81203 comics validation	Everyone	68 of 60 h	113 %







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Thank you!



