



All-Team Meeting

5/21



Zulip

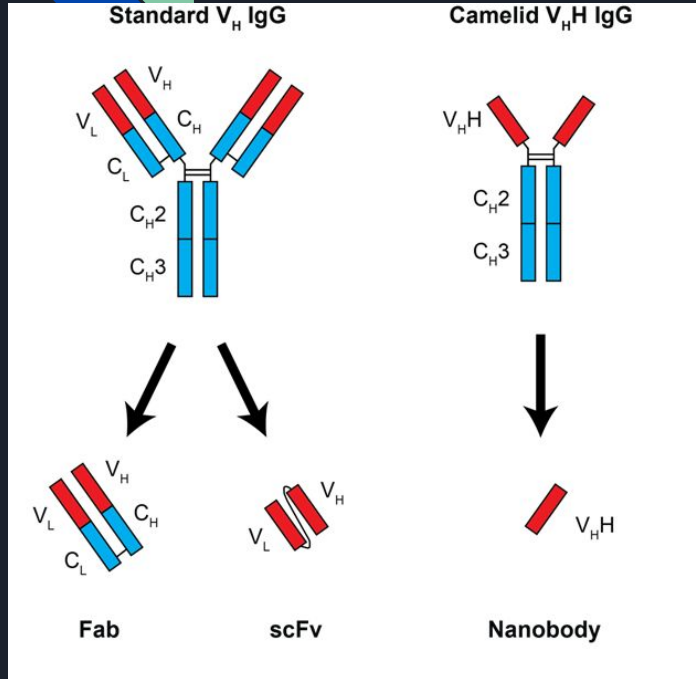
- Using the different modes of Zulip
 - Unless you have a Windows Phone, get the app!
 - Unless you always have the browser open, use the desktop app!
- Settings -> Notifications!
 - Turn them on!
 - If you don't open the app often, you can get email notices.
- Report issues on #zulip!



Project Updates

1. Switching Projects
 - a. Cell Free Metabolic Engineering is > 1 Year Project
 - b. Success this year top priority
2. Proposals from UW Labs
 - a. Gu Lab
 - b. Chunfu - postdoc in Baker Lab
3. Selected Dr. Gu's Project

Dr. Gu: Nanobody CID Binders



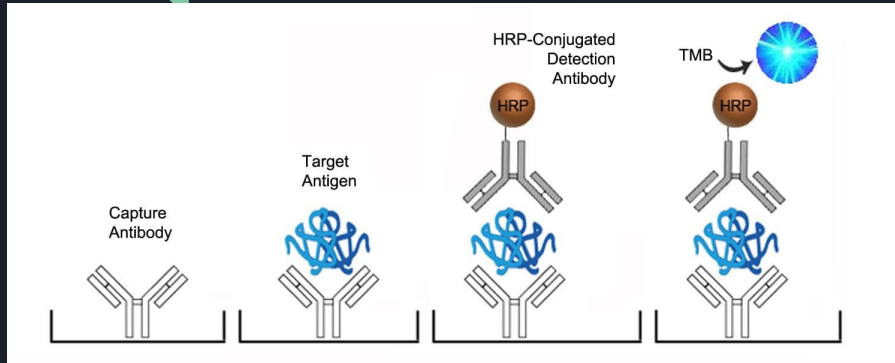
Nanobodies:

- Small, stable antibody fragments
- Easy to manipulate
- Expressable *in vivo* (“Intrabodies”)

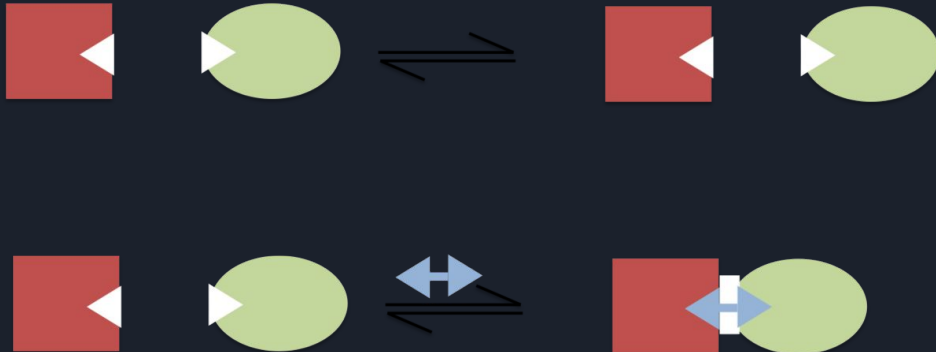
HUGE Library:

- Chemically synthesized 10^9 - 10^{12} variants

Chemically Induced Dimerization

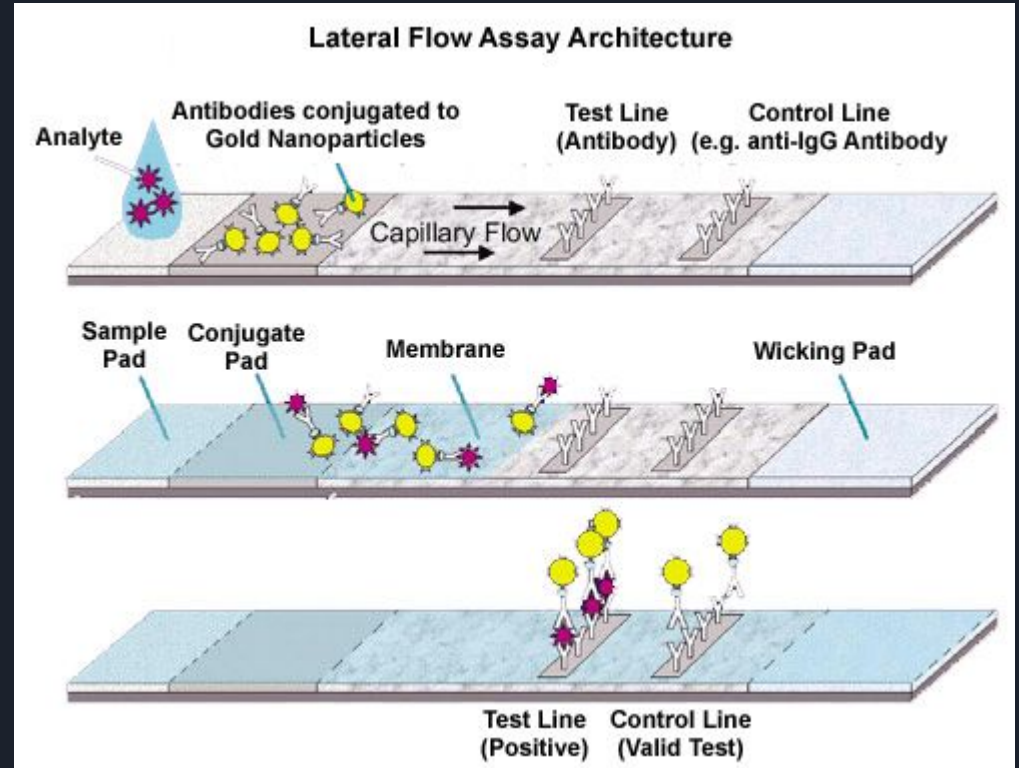


- First nanobody binds to molecule
- Second nanobody binds to molecule-nanobody complex
 - Stabilizes complex
- **Result:** Dimerization of nanobodies in presence of molecule



Application #1: Diagnostics

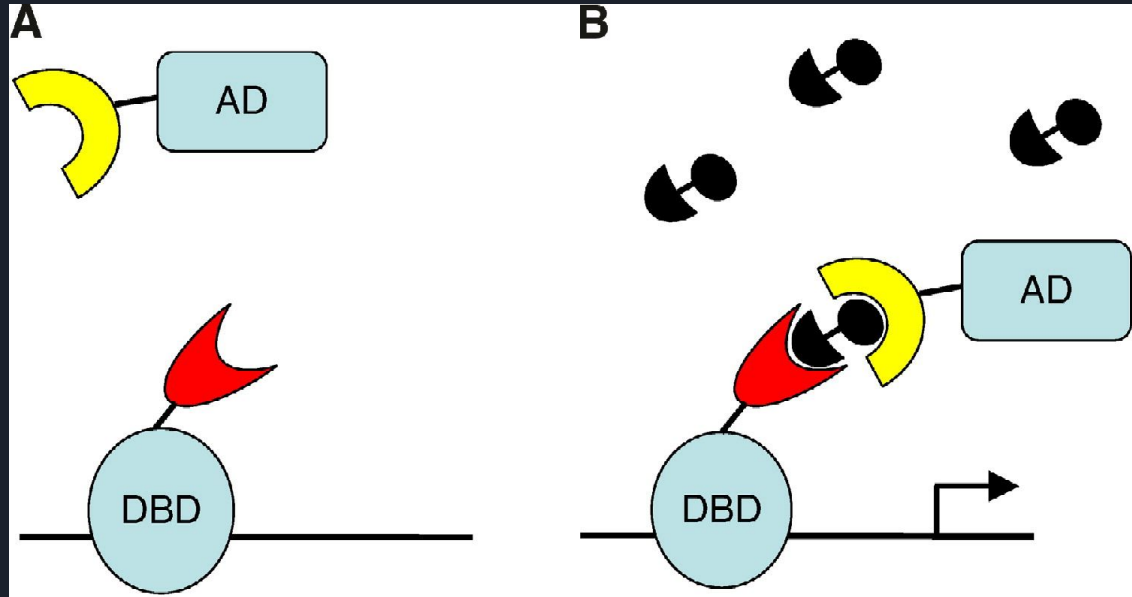
- Readily detect molecule of interest in lateral flow assay
 - Construct comprehensive assay for several molecules



Gold Particle Assay

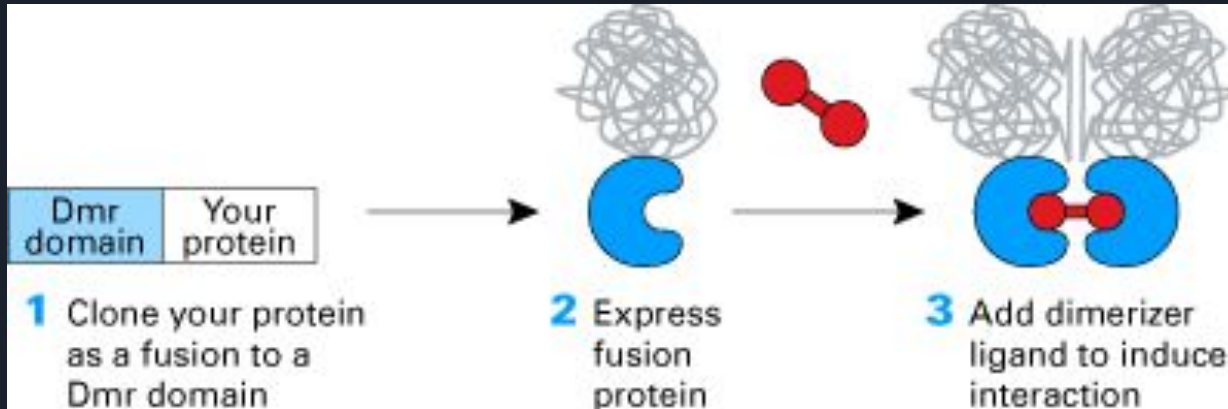
Application #2: Metabolic Engineering

- Molecule induced transcriptional switches
 - Biosensor: molecule induces expression of fluorescent reporter



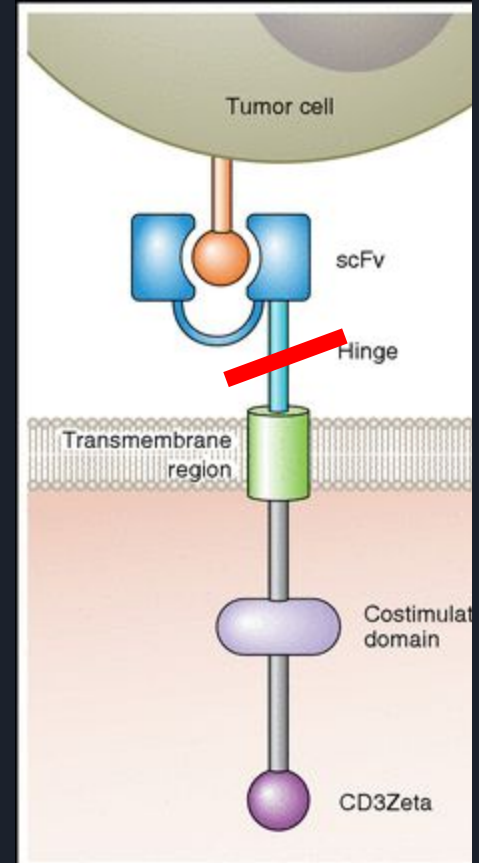
DBD = DNA Binding Domain
AD = Activation Domain
Yellow/Red Parts = Nanobodies

Application #2: Metabolic Engineering



Application #3: CAR T-Cell Therapy

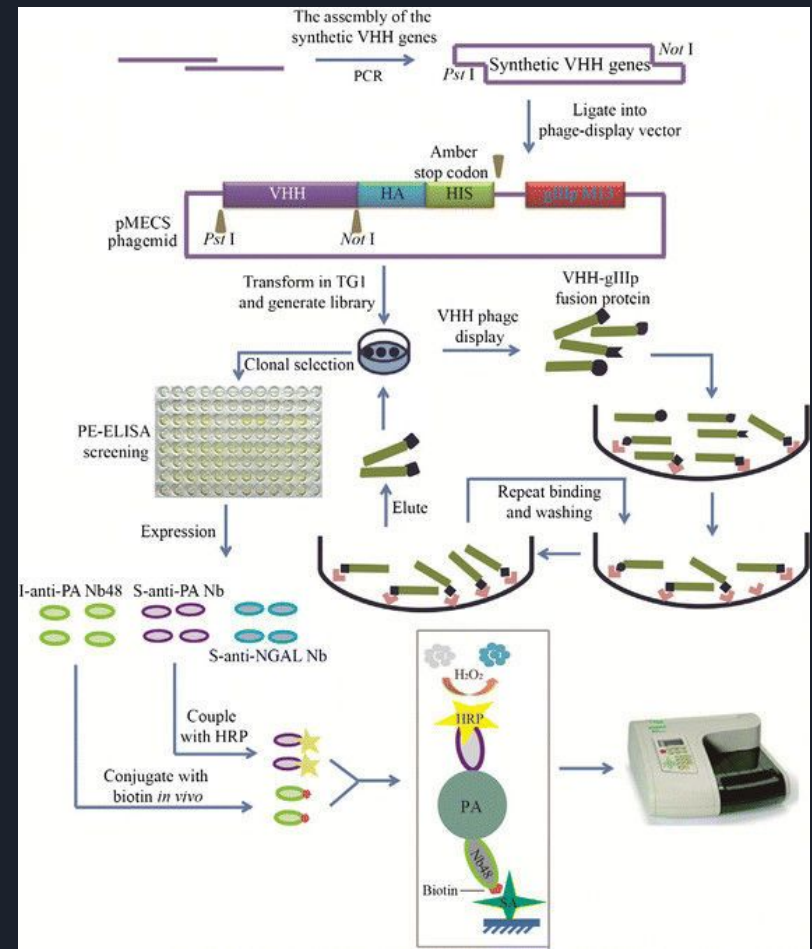
1. Current CAR T-Cell Therapy hindered by toxicity
2. Use CIDs to Localize activation
 - a. Separate CAR and T-Cell with CID domains
 - b. Induced with molecule by tumor cells



Outline

1. Identify Molecules of interest
 - a. You can help!
 - b. Contact faculty, companies
2. Screen for nanobody CID:
 - a. 2 Rounds of Nanobody Screening
 - b. Specific protocols from Gu Lab
3. Construct Biosensor
4. Test

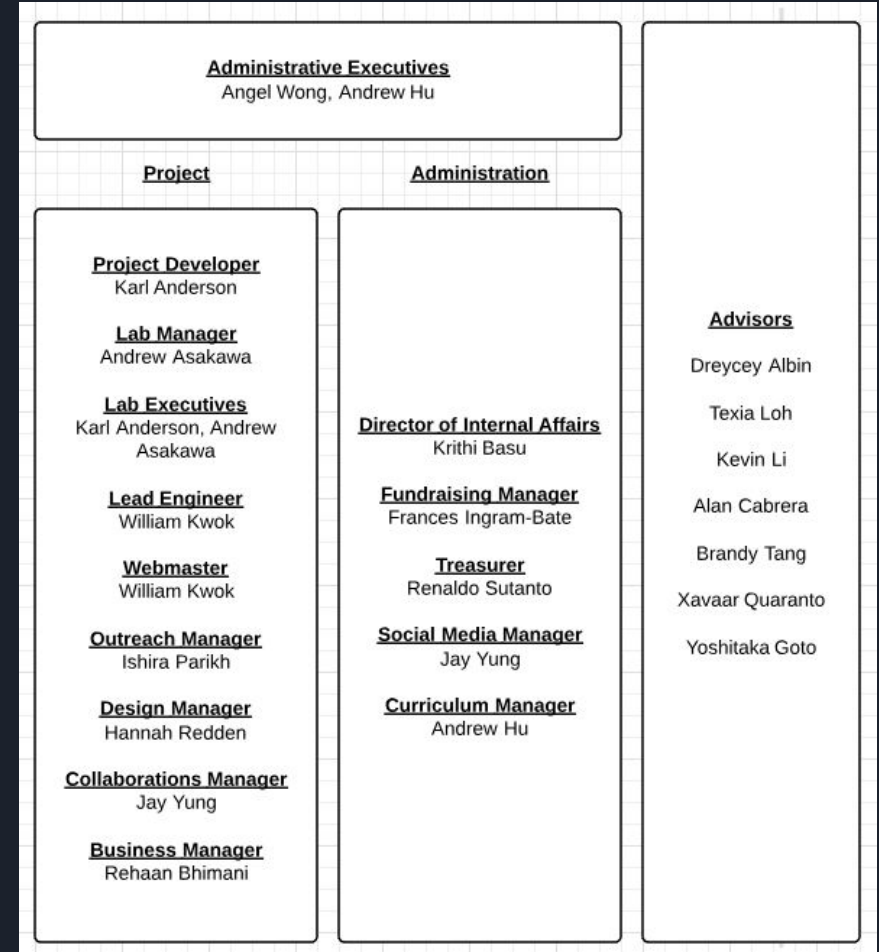
More details coming soon



General Outline of 1st screening

Leadership Structure

- Administrative Executive
 - Yoshi is graduating
 - Angel & Andrew Hu taking on this role





Giant Jamboree

Hynes Convention Center in 340 Teams from Around the World!!!
Boston, MA, USA
http://2018.igem.org/Giant_Jamboree

	WEDNESDAY October 24	THURSDAY October 25	FRIDAY October 26	SATURDAY October 27	SUNDAY October 28	MONDAY October 29		
MORNING		Opening Ceremony	Team Presentations and Poster Sessions	Team Presentations and Poster Sessions	Finalists Presentations	Post-Jamboree Events Industry Tours University Tours Discounted tickes for site seeing activities, museums and tours!		
AFTERNOON		Team Presentations and Poster Sessions			Team Presentations and Poster Sessions		Team Presentations and Poster Sessions	Keynote Speakers and Special Sessions
EVENING								Registration Opens and Audio / Visual Checks
NIGHT		Workshops and Special Events	Workshops and Special Events	Workshops and Special Events	Celebration Social			

Individual Cost Break Down

3 Main Categories make up the itinerary:

- Airplane Tickets
- Hotel or Airbnb Stay
- Individual Registration Fee

Total Cost Estimate

\$300 Airfare

+ \$75 Airbnb

\$695 Registration Fee

\$1,070

URP Grant

- “We encourage all students who have a paper, **poster**, or scholarly creative work that has been accepted for presentation at a professional conference to apply for an award.” – URP
 - Every member is eligible to apply! SO APPLY
 - Last year, every person who applied received the award.
 - SO ONCE AGAIN, APPLY!!!!
- ~ \$300-400

HUB Travel Grant

- \$1500 that the iGEM RSO applies for
- This fund gets distributed among all members going (think \$100)

\$1,070 estimated total fee

- \$500 from both grants
- Crowdfunding!

Possibly affordable?



iGEM Deliverables Deadlines

- Biobricks: October 10
- WIKI FREEZE: OCT 17



Driving to Outreach

- Outreach=Gold Medal Requirement
- Events the Week after Finals
 - International Community School (6th grade)
 - Rainier Beach High School (11th & 12th grade) (low income school)
 - Homeless students, refugees, & ~70% of students qualify for free or reduced-price meals
- We NEED people to drive, or we will probably have to cancel!
- Driving Doc (Under Upcoming Outreach Events on Zulip)
 - <https://docs.google.com/document/d/1XeIDDCDCDDTG4hdK9DrcRBI-SMX0-86q9d2uzBksP8oE/edit?usp=sharing>
 - (Or just talk to us after the meeting)
- Reminder about the outreach meeting from 8-9 at SUZ 334 tonight!



Social Media!

- @washington_igem
- Humans of iGEM
 - Photos and questions
 - PM on Zulip if you want to participate!



Team



Questions?