

# BIOMOD

Saturday, October 27<sup>th</sup> 8:30am–4:30pm

Sunday, October 28<sup>th</sup> 9:15am–11:30am

University of California, San Francisco

Mission Bay Campus

Genentech Hall, Byers Auditorium

1700 4<sup>th</sup> Street, San Francisco CA

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## Schedule

### Friday, October 26<sup>th</sup>, 2018

- 2:15pm to 6:15pm
- Team Registration at the University of California (by prior arrangement)
  - 600 16<sup>th</sup> Street, San Francisco, CA 94058 – Genentech Hall
  - Check in at Security on the 1<sup>st</sup> floor. Present your valid ID for a visitor's badge
  - Proceed to the Douglas Lab on the 4<sup>th</sup> Floor – Room S472 (follow the signs!)
  - Pick up your BIOMOD ID badge and t-shirt!
  - Practice your presentation in a UCSF Conference room (by prior arrangement)

### Saturday, October 27<sup>th</sup>, 2018

07:30-07:45	Make your way to UCSF Mission Bay — Genentech Hall.
07:45-8:30	<b>Breakfast available to all registered participants</b>
08:30-08:45	Welcome — Opening Remarks
08:45-09:00	Team KANSAI
09:00-09:15	Season
09:15-09:30	Team Sendai
09:30-09:45	NanoGear-NTU
09:45-10:00	HUST-CHINA
10:00-10:30	<b>Coffee Break</b>
10:30-10:45	Crystalline Entity
10:45-11:00	Biodesigners
11:00-11:15	ATCGU
11:15-11:30	Tianjin U
11:30-11:45	Cheeky Nanos
11:45-12:00	YOKABIO
12:00-12:15pm	<b>Group Photo</b>
12:15-13:30	<b>Lunch</b>
13:30-13:45	Find'n'Bind
13:45-14:00	NANO-JLU
14:00-14:15	Team HANDAI
14:15-14:30	Team Tokyo
14:30-14:45	NanoWolves
14:45-15:00	NanoBioUANL
15:00-15:30	<b>Refreshment Break</b>
15:30-15:45	DNAliens
15:45-16:00	Osteotarget
16:00-16:15	UCalgary
16:15-16:30	Wrap up
16:30-17:00	Judges submit scores.

### Sunday, October 28<sup>th</sup>, 2017

09:00-09:15	Make your way to UCSF, Genentech Hall.
9:15-10:00	<b>Breakfast available to all registered participants</b>
10:00-11:30	<b>Awards &amp; Closing Ceremony</b>
11:30-12:30pm	Board of Directors Meeting (Shokat, Rothmund, Murata, Wickham, Douglas)
12:00pm-3:00	Socialize + Lunch at Spark Social (RSVP Required)

## Presentation Details

All team presentations will take place in Byers Auditorium in the Genentech Hall building on the University of California, San Francisco Mission Bay Campus.

The **TOTAL** time allotted to each team is 15 minutes. This includes laptop setup (**1 min**), present slides (**10 min**), audience questions (**~3 min**), and exiting the stage + buffer time (**1 min**). The time limits will be strictly enforced, so rehearsing in advance is strongly recommended to avoid being cut off. The room is equipped with a projector and screen. *Please remember to bring laser pointers, converters, adapters, cables, etc., as these will **not** be provided by BIOMOD.*

If you haven't already done so, you may sign up for a practice session here: <http://bit.ly/2PsA4eX>. Practice sessions are strictly limited to 30 minutes. Thanks in advance for arriving on time, and finishing in the time allotted.

## Registration/Check-in

**All teams are required** to check-in for BIOMOD on Friday, October 26th between the hours of 14:15–18:15. Registration will be located in the Douglas Lab at the University of California, San Francisco Mission Bay Campus in Genentech Hall. Each individual will be required to check-in with a valid ID at the UCSF Security Desk on the 1<sup>st</sup> floor of Genentech Hall. Once you receive a visitor's badge, you may proceed to the 4<sup>th</sup> Floor and office suite S472.

To get to the Douglas Lab office suite, take the elevator directly behind the security desk to the 4<sup>th</sup> floor. When you get off the elevator walk to the carpeted hallway and proceed to the right. Turn left into the 2<sup>nd</sup> corridor marked "S401-484". Walk straight down this corridor and bear toward the right, entering the common area marked S472. Proceed through the common area, through the double glass doors and into the S472 office suite.

All team members must arrive together as a group.

At registration each team will receive:

- BIOMOD ID/Security badges (which must be worn at **all times** while on UCSF campus)
- Lyft voucher code worth \$50 for transportation to and from UCSF campus (for student use only). It is a good idea to download the Lyft App on your smart phone and set up your account before departing your home country
- Participation certificates
- Lunch vouchers at Spark Social for Sunday closing lunch (by RSVP only)
- 2018 BIOMOD t-shirts

## Hotel

The official hotel of BIOMOD 2017 is the Marriott Marquis in downtown San Francisco.

Address:

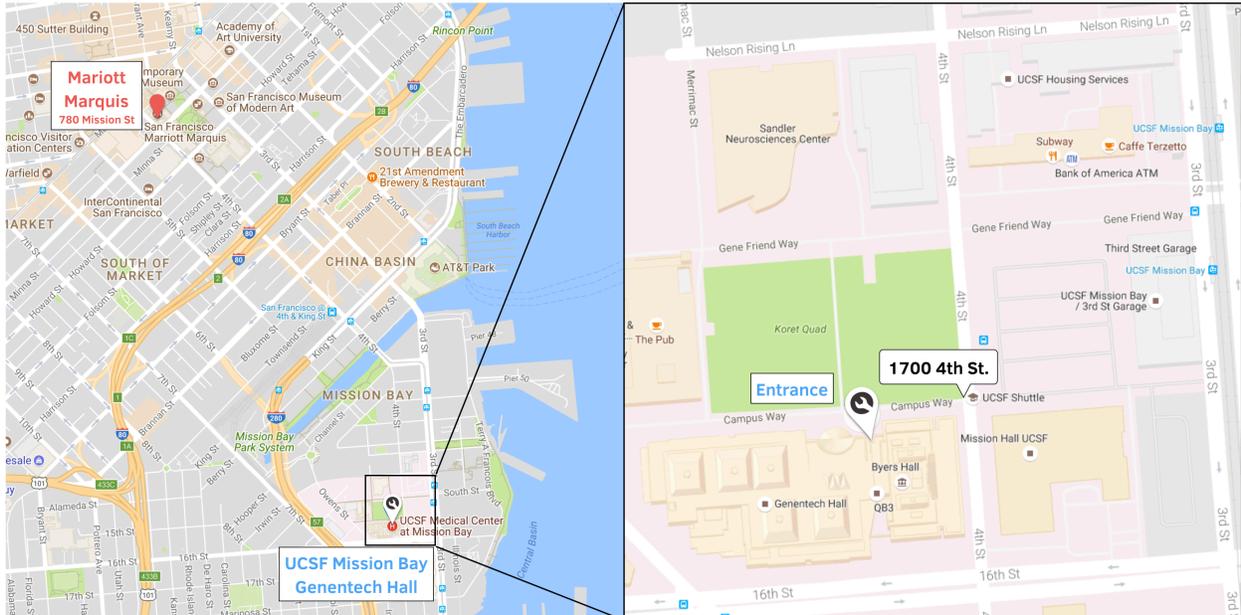
780 Mission Street  
San Francisco, CA 94103  
Telephone: (415) 896-1600

**Check-in time is at 4:00 PM**  
**Check-out time is at 11:00 AM**

We would like to inform everyone staying at the Marriott that several hotels in San Francisco are in the midst of labor negotiations with the city's Hotel Workers Union, which has resulted in a strike. Guests will likely see demonstrators and may hear noise outside of the hotel. Hotel management has assured us that the hotel is fully operational and they have heightened their security measures during this strike. When you arrive at the hotel, please let security know that you are checking-in and you will be escorted to the check-in desk in the lobby. Please be sure to register all room occupants during the check-in process. Each subsequent time a guest enters the hotel, they will be asked to show their room key as non-guests are not allowed inside the hotel property.

In the United States, private-sector employees have a legally protected right under the National Labor Relations Act to strike in order to gain better wages, benefits, or working conditions and these workers cannot be discharged or otherwise disciplined for taking such action. This is not an uncommon practice in the US.

**Marriott Marquis Map:** <http://bit.ly/2Ez473R>



## Getting to BIOMOD

**Location:** University of California, San Francisco  
Mission Bay Campus  
Genentech Hall, Byers Auditorium



**Address:** Near 1700 4<sup>th</sup> Street, San Francisco CA 94158.  
(Direct taxi or Lyft to this address, and then walk west past Byers Hall to Genentech Hall)

## Transportation Options

From: Marriott Marquis (780 Mission Street, San Francisco, CA 94103)

To: the UCSF Mission Bay Campus (1700 4<sup>th</sup> Street, San Francisco, CA 94158)

### **Lyft** \$8–\$10 (10 minutes)

From anywhere in San Francisco and surrounding areas. Download the Lyft app on your smart phone and set up an account. Use your phone to arrange quick car service.

This app uses your smart phone's GPS to detect your location and connect you with the closest available driver. You will receive a text message with a photograph of your background-checked driver and their car, you'll be able to track their approach, and get a text message when they arrive. Payment can be split among passengers and will be securely charged to the credit card on file. No cash will change hands.

Use the street address of 1700 4<sup>th</sup> Street, San Francisco for easiest access to Genentech Hall.

### **Lyft Vouchers**

In an effort to further help offset costs for attending BIOMOD, we are pleased to provide each team a \$50 voucher code for Lyft trips. To use this voucher you must download the Lyft app on your smart phone and set up an account. Note: if you are **new** Lyft user, you may also be eligible for other promotional credits upon setting up a new account. Visit <https://www.lyft.com/promo-coupon-code-free-rides> for details.

You may use the vouchers for any trip picking-up or dropping-off within 0.5 miles of the UCSF campus, the Marriott Marquis, or Spark Social.

### **Taxi:** \$10–15 (12 min)

Use the taxi stand at the Marriott Marquis and take a taxi to UCSF. Use the street address of 1700 4<sup>th</sup> Street, San Francisco for easiest access to Genentech Hall.

## Once at UCSF Campus – Getting to Genentech Hall

Once you arrive on Campus from the taxi drop off area on 4<sup>th</sup> street, walk west along Campus Way, past Byers Hall, to the entrance of Genentech Hall indicated on the map. Note that Campus Way is a sidewalk path that is just north of Genentech Hall and south of “Koret Quad” (trees and grass).

Enter the building at main Genentech Hall entrance between the circular stone steps and the Byers Hall entrance. Here is a Map of UCSF Mission Bay Campus:

[https://www.dropbox.com/s/579hj3w64twg445/UCSF\\_Mission\\_Bay\\_Map.pdf?dl=0](https://www.dropbox.com/s/579hj3w64twg445/UCSF_Mission_Bay_Map.pdf?dl=0)

## Building Security

The Genentech Hall building at UCSF will only be accessible through the main Genentech Hall entrance. You must bring ID for security check-in, and you must wear your BIOMOD ID badge at all times while on campus.

Please note that the building doors will not be unlocked before 7:45am on Saturday, and 8:30am on Sunday. Please do not arrive early.

## Meals

Saturday: On-site breakfast, morning snack, lunch, and afternoon refreshments will be provided.

Sunday: On-site breakfast will be provided. Lunch will be held at Spark Social (601 Mission Bay Blvd North, San Francisco, CA – a 5 minute walk from campus), immediately following the Jamboree. Previous RSVP required.

If you have any food allergies that were not noted on your registration, please let us know immediately.

## Judging

Our aim is to maintain an open and fair process for evaluating each team's performance. Teams will be scored by judges using a point system. The judging process will have two stages: online content (worth up to **75 points**) and live presentation (worth up to **25 points**).

### Online content scoring

- Maximum combined score for online content is **75 points** (= 50 points for wiki + 25 points for internet video)
- Scores will be determined by a range-voting system.
- Five (5) judges will be randomly assigned to each team.
- Judges will evaluate each project according to a rubric (see below) and assign a point value in each category.
- Highest and lowest judges' total scores are excluded to remove outliers.
- Three remaining judges' scores will each weighted by 1/3 and combined to determine the total scores for each category.

### Website (up to 50 points)

#### Project Idea (20 points)

- Relevance: Has the team made a strong case that their project idea is scientifically and/or technologically interesting? **(5 points)**
- Specification: Are the project goals well-defined? (i.e. Does the team explicitly state what criteria need to be met in order to consider the project a success?) **(5 points)**
- Feasibility: Was the proposed solution feasible? (i.e. Was it reasonable to expect that the solution could be implemented by a BIOMOD team in one summer?) **(5 points)**
- Merit: Is the proposed solution a good one? Is it particularly elegant or innovative? **(5 points)**

#### Project Documentation (20 points)

- Clarity: Is the project description well-written and easy to understand? Does it include the background and motivation of the project, methods, results, and discussion? Are the figures easy to understand? **(10 points)**
- Transparency: Are all of the raw experimental data and source files easily accessible? Would it be straightforward to attempt to reproduce the team's results? **(5 points)**

- Layout: Is the team's project page arranged in a clear and logical fashion? **(5 points)**

#### **Project Execution (10 points)**

- Execution: Did the team accomplish what they set out to do? **(10 points)**

#### **YouTube video (up to 25 points)**

- Overall impact: Was the video interesting? Did you want to watch more than once? **(10 points)**
- Clarity: Was the project described in a simple and clear manner that could be easily understood by a wide audience? **(10 points)**
- Production: Was the sound and video high quality? Were the images focused and scaled properly? **(5 points)**

#### **Presentation scoring (up to 25 points)**

- Content: Were the slides clear and easy to understand? Did the project narrative have a logical flow, with clearly stated goals and results? **(10 points)**
- Delivery: Did the speaker(s) give a well-rehearsed, well-paced presentation? Did the speaker(s) engage with the audience and maintain good eye contact? **(10 points)**
- Impact: Was the presentation interesting? fun? clever? memorable? **(5 points)**

#### **Judges**

- Judges were selected from a pool of BIOMOD faculty mentors and outside experts.
- Mentors will not evaluate their own team.
- The 2018 BIOMOD Jamboree Judges are:

Akinori Kuzuya	Marcos de Donato Capote
Alexandre Baccouche	Mario Alberto García-Ramírez
Alice Williamson	Masahiro Takinoue
Amanda Musgrove	Masami Hagiya
Birka Lalkens	Max Anikovskiy
Chenxiang Lin	Oxana Kharissova
Christopher Snow	Patrick Yue
Chunxi Hou	Peng Wang
Dayong Yang	Philip Lukeman
Edward Chern	Philip Tinnefeld
Elisa Franco	Ralf Jungmann
Francesco Ricci	Robert Yung-Liang Wang
Francis Stewart	Saba Nojoumi
Grisel Fierros Romero	Satoshi Murata
Hans-Georg Braun	Shelley Wickham
Henry Hess	Shin-Ichiro Nomura
Hisashi Tadakuma	Shizhen Wang
Huang Chao	Shogo Hamada
Ibuki Kawamata	Shuwen Guan
Jeng-Shiung Jan	Szecheng Lo
Jin Liu	Takashi Nakakuki

Jorgen Kjems  
Joseph Schaeffer  
Junichi Taira  
Kalaumari Mayoral Peña  
Kei Fujiwara  
Keisuke Morishima  
Ken Komiya  
Kishio Ono  
Lawrence Lee  
Manish Gupta

Thorsten-Lars Schmidt  
Tural Aksel  
Vikramaditya Yadav  
Yanzhi Xia  
Yi Zhan  
Yibing Huang  
Yonggang Ke  
Yu-Fon Chen  
Zhang Ge

## Award Categories

The following prizes will be awarded:

### Top Prizes

- Grand prize = 1st highest total combined points from wiki + video + presentation
- 1st runner up = 2nd highest total combined points from wiki + video + presentation
- 2nd runner up = 3rd highest total combined points from wiki + video + presentation

### Category awards

- Best Website = 1st place, 2nd place, 3rd place
- Best YouTube Video = 1st place, 2nd place, 3rd place
- Best Presentation = 1st place, 2nd place, 3rd place
- Audience Favorite = 1st place, 2nd place, 3rd place

### Project awards

- Bronze: Team satisfied all minimum requirements for judging (i.e. Submitted a complete Project wiki and uploaded a YouTube video)
- Silver: Satisfied criteria for Bronze, plus at least one device (part of the system) in the team's design is worked as expected.
- Gold: Satisfied criteria for Silver, and overall point score from Wiki + YouTube + Jamboree presentation are in top 50% of all teams.

### Special Awards

- The 8th Annual Molecular Robotics Award (by [MOLBOT](#), Japan)
- Audience Choice Award – Best Project
- Best Team T-shirt Award

## San Francisco — Places to Eat

### Downtown (near the Marriott Marquis)

[Peet's Coffee](#) (773 Market Street, between 3<sup>rd</sup> and 4<sup>th</sup> Street) - Coffee cafe chain offering a variety of coffee drinks & pastries. Open daily from 6:30 AM to 7:30 PM.

[Westfield Center](#) (865 Market Street). This large, shopping center offers many international dining options in the lower level food court, including Thai, Japanese, Chinese, Mexican, Korean, Italian and American fare. Hours are 10 AM to 8:30 PM Monday thru Saturday; 10 AM to 7 PM on Sundays.

[Metreon](#) (135 Fourth Street @ Mission Street). Large shopping center with many restaurant and entertainment options, including Mexican, Burgers, Filipino, Thai, Vietnamese, Italian, as well as ice cream, dessert and coffee shops. Hours are 10:30 AM to 9:30 PM daily.

### UCSF/Campus (1-5 min walk from UCSF)

[Spark Social](#) (601 Mission Bay Blvd. North at 4<sup>th</sup> Street) — food from a variety of gourmet food trucks. \$5-\$15. Open weekdays 11 AM to 3 PM and 5 PM to 9 PM, Saturdays 11 AM to 9 PM, and Sundays 11 AM to 5 PM.

[ParkLab Gardens](#) (1379 4<sup>th</sup> Street, across from Spark Social) — miniature golf course (Stagecoach Greens) with a unique San Francisco theme and a variety of food and beverage trucks. Open daily from 11 AM to 9 PM.

[Oda Restaurant & Brewery](#) (1500 Owens Street at Nelson Rising Lane) — pizza, sandwiches, salads, fresh brewed beer. \$10-\$20.

[SF Kebab](#) (550 16<sup>th</sup> Street at 3<sup>rd</sup> Street) — Mediterranean and Middle-Eastern food. \$8-\$20

### Potrero Hill (10–15 minute walk from UCSF)

[Sunflower](#) (288 Connecticut Street at 18th) — Excellent Vietnamese food \$8–12.

[Pera](#) (1457 18th St) — Mediterranean tapas, good food. \$15–25.

[Live Sushi](#) (2001 17th Street at Kansas) — Sushi \$11–30.

### Dogpatch (10–15 min walk from UCSF)

[Serpentine](#) (2495 3rd Street) — New American. Good burgers. \$12–30.

[Moshi Moshi](#) (2092 3rd Street, near the corner of 18th) — Sushi/Japanese. Standard American Japanese restaurant fare. \$15–20.

### Mission (10 min taxi or Lyft from UCSF, or BART from downtown @ 16<sup>th</sup> and 24th Street)

[Taqueria Vallarta](#) (3033 24th Street, near Harrison) — Excellent street tacos. \$5–10.

[Taquerias El Farolito](#) (2779 Mission Street @ 24th) — Great burritos. \$8–12.

[Limón Rotisserie](#) (1001 South Van Ness or 524 Valencia) — Amazing Peruvian food. \$12–20.

[Yamo](#) (3406 18th Street @ Mission) — Burmese food. Hole in the wall, usually a line. \$8–10.

[Namu Gaji](#) (499 Dolores Street @ 18th) — Korean fusion. Next to Bi-Rite Ice Cream! \$14–20.

[La Taqueria](#) (2889 Mission Street, near 25th) — “[Best Burrito in America](#)” Great tacos; Crowded. \$10–15.

...MANY other great options on Mission Street, Valencia Street, and 24th Street.

## Organizer Contact Info

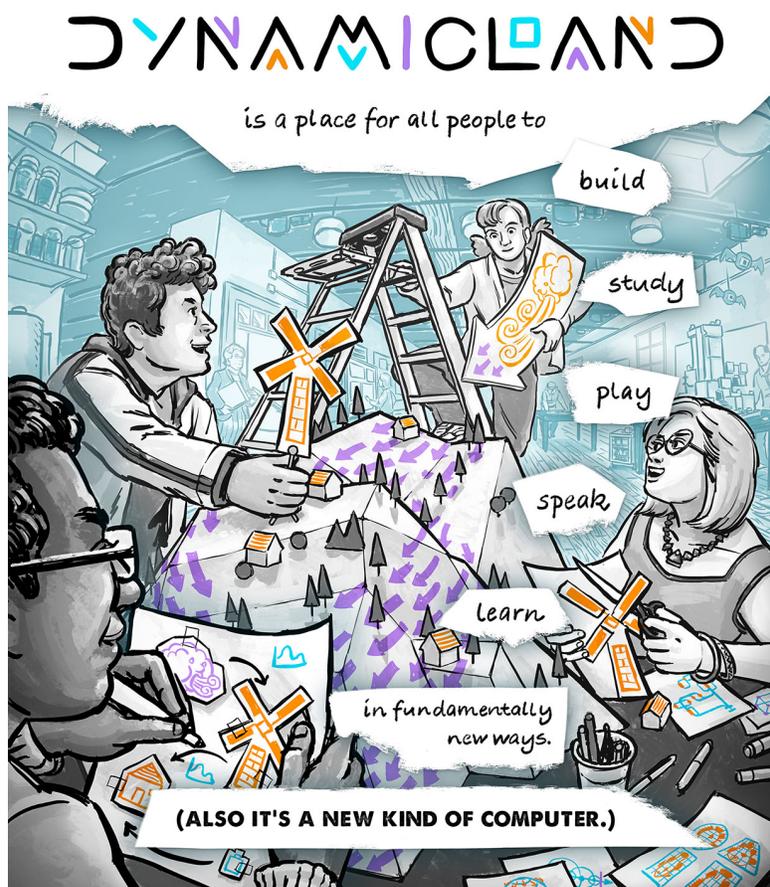
Rebecca Wheeler  
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Shawn Douglas  
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email: [shawn@biomod.net](mailto:shawn@biomod.net)

## Dynamicland Excursion

We have partnered with Dynamicland to offer tours on Monday, October 29<sup>th</sup>.

Website: <https://dynamicland.org/>  
Tour signup form: <http://bit.ly/2CCH4IX>



2018 BIOMOD Sponsors



## BIOMOD History

# BIOMOD nanoscale design competition for college students



**Over 1400 students, mentors, and judges have participated since 2011.**

The BIOMOD competition was begun at Harvard University by the Wyss Institute for Biologically Inspired Engineering, which conducted the competition during the years 2011 to 2015. The mission of the competition was to inspire a generation of students to learn to engineer biomolecules at the nanometer scale. In 2016, BIOMOD Foundation assumed management of the competition.

From 2011–2015, the lead events coordinator at the Wyss Institute was Jermaine Reid, who was instrumental in making BIOMOD a success. Jermaine worked closely with Mary Tolikas (Director of Operations), along with Alison Reggio, Mary Wozniak, and Caitlin Wells.

The BIOMOD website and Competition Management Software were originally developed by Kristian St.Gabriel and Byron Hinebaugh.

The BIOMOD Foundation is currently run by its board of directors: Shawn Douglas (UCSF), Satoshi Murata (Tohoku University), Paul Rothemund (Caltech), Kevan Shokat (UCSF), and Shelley Wickham (University of Sydney) and is supported by Rebecca Wheeler (lead organizer), Robert Pierce (legal), and Rachel Dulay (accounting).

This year, 2018, marks the third time that BIOMOD will be hosted in California.