

BIOMOD

Saturday, October 26th 08:00 – 16:15

Sunday, October 27th 09:15 – 11:30

University of California, San Francisco
Mission Bay Campus
Genentech Hall, Byers Auditorium
1700 4th Street, San Francisco CA

Quick Guide

| | |
|--|----|
| Schedule | 2 |
| Presentation Details | 3 |
| Registration/Check-in | 3 |
| Hotel | 4 |
| Getting to BIOMOD | 4 |
| Transportation Options | 4 |
| Once at UCSF Campus – Getting to Genentech Hall..... | 5 |
| Building Security..... | 5 |
| Meals | 6 |
| Judging | 6 |
| Award Categories | 7 |
| San Francisco — Places to Eat | 8 |
| Organizer Contact Info..... | 9 |
| 2019 BIOMOD Sponsors..... | 10 |
| BIOMOD History | 11 |

Schedule

Friday, October 25th, 2019 from 13:15 to 17:15

- Team Registration at the University of California (by prior arrangement)
- 600 16th Street, San Francisco, CA 94058 – Genentech Hall
- Check in at Security on the 1st floor. Present your valid ID for a visitor's badge
- Proceed to the Douglas Lab on the 4th 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 26th, 2019

| | |
|-------------|--|
| 08:00 | Doors Open @ UCSF Genentech Hall– Please do not arrive earlier than 08:00 |
| 08:00–08:45 | Breakfast available to all registered participants |
| 08:45–09:00 | Welcome — Opening Remarks |
| 09:00–09:15 | McMaster University — Lego™ Zyme |
| 09:15–09:30 | Ocean University of China — Team Season |
| 09:30–09:45 | Tohoku University — Team Sendai |
| 09:45–10:00 | Colorado State University — BeaconX |
| 10:00–10:30 | Morning Break |
| 10:30–10:45 | Chang Gung University — CGUMED |
| 10:45–11:00 | St. John's University — Toehold Conga Nanny |
| 11:00–11:15 | University of Sydney — FilterPhytes |
| 11:15–11:30 | National Taiwan University — NTU_Taiwan |
| 11:30–11:45 | The Ohio State University — OhioMOD |
| 11:45–12:00 | Group Photo |
| 12:00–13:15 | Lunch Break |
| 13:15–13:30 | Kansai University — Team Kansai |
| 13:30–13:45 | Tecnológico de Monterrey — DNAztech |
| 13:45–14:00 | TU-Berlin — smart B.O.B. |
| 14:00–14:15 | University of British Columbia, Vancouver — Biomeddling Kids |
| 14:15–14:30 | Jilin University — Nano-Jlu |
| 14:30–15:00 | Afternoon Break |
| 15:00–15:15 | Imperial College London — nanoDIPs |
| 15:15–15:30 | National Cheng Kung University — NCKU-ONA |
| 15:30–15:45 | Kyushu Institute of Technology — YOKABIO |
| 15:45–16:00 | University of Tokyo — Team Tokyo |
| 16:00–16:05 | Closing Remarks |

Sunday, October 27th, 2019

| | |
|-------------|---|
| 09:15 | Doors Open @ UCSF Genentech Hall – Please do not arrive earlier than 09:15 |
| 09:15–10:00 | Breakfast available to all registered participants |
| 10:00–11:30 | Awards & Closing Ceremony |
| 11:30–12:30 | Board of Directors Meeting (Shokat, Rothemund, Murata, Wickham, Douglas) |
| 12:00–3:00 | 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. *Please note that, with the exception of bottled water, food and drinks are not allowed in Byers Auditorium at any time.*

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/2oxlo4y> (right-click in your desired time-slot and enter a comment with your team name). 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 25th between the hours of 13:15–17:15. 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 1st floor of Genentech Hall. Once you receive a visitor's badge, you may proceed to the 4th Floor and office suite S472.

To get to the Douglas Lab office suite, take the elevator directly behind the security desk to the 4th floor. When you get off the elevator walk to the carpeted hallway and proceed to the right. Turn left into the 2nd 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.

There is a maximum occupancy limit for the auditorium and we therefore have very limited space for guests. If any team or individual would like to bring a guest to watch the presentations or awards, it must be arranged in advance. Depending on space limitations, non-registered individuals may not be granted access to the Jamboree and will be required to pay full registration fees and a registration surcharge upon arrival.

At registration each team will receive:

- BIOMOD ID/Security badges. **Your BIOMOD ID badge must be worn at all times while on UCSF campus.** Please be sure you have it with you each day. We are not able to print new badges on the spot, so you will have to return to your hotel if you do not have it in your possession upon arrival
- 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 for Sunday's Spark Social closing lunch (by RSVP only)
- 2019 BIOMOD t-shirts

Hotel

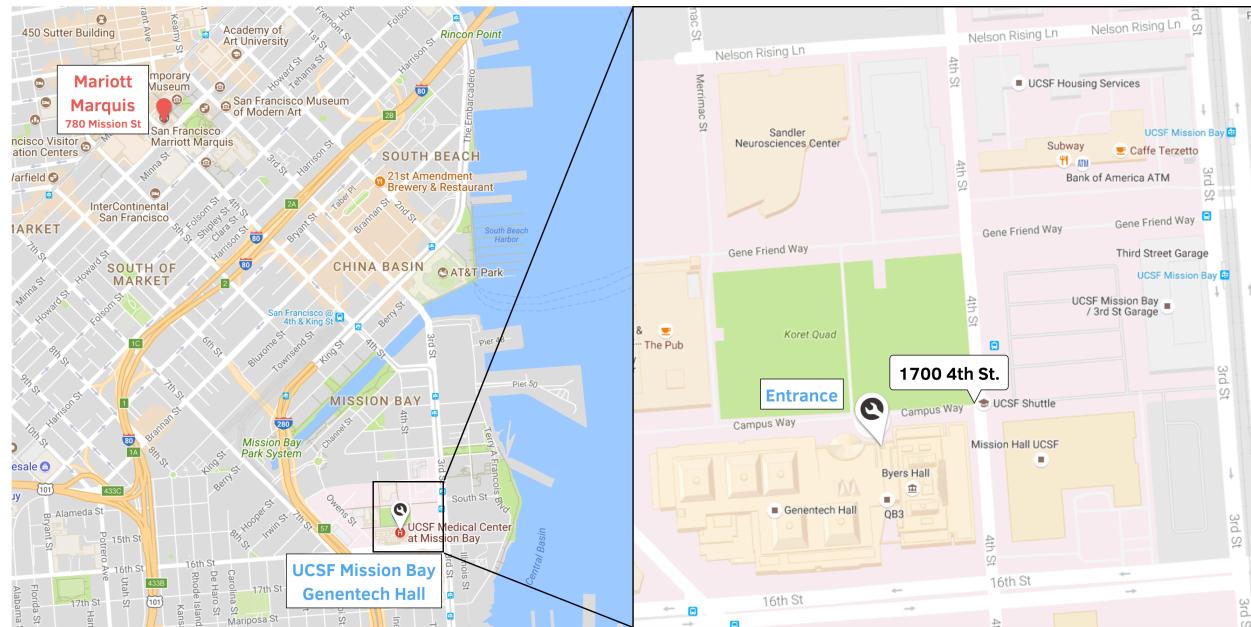
The official hotel of BIOMOD 2019 is the Marriott Marquis in downtown San Francisco.

Address:

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

Check-in time is 16:00
Checkout time is 11:00

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 4th 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: UCSF Mission Bay Campus (1700 4th 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 4th 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 4th 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 4th 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

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. If you forget your BIOMOD ID badge you will have to return to your hotel to get pick it up as additional ID badges cannot be printed on-site.**

Please do not arrive early. Building doors will not be unlocked before 08:00 on Saturday and 09:15 on Sunday.

Meals

- Saturday: On-site breakfast, morning snack, lunch, and afternoon refreshments will be provided.
- Sunday: On-site breakfast will be provided. Our closing 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. All are welcome at Spark Social, however meal vouchers are only available to those who RSVP'd in advance.

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

Please be courteous of other Biomod participants and take only one serving of food at a time. You will have the chance to come back for seconds after everyone else has been served.

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.

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 Annual Molecular Robotics Award (by MOLBOT, Japan)
- Audience Choice Award – Best Project
- Best Team T-shirt Award
- Best Use of Game Engine

San Francisco — Places to Eat

Downtown (near the Marriott Marquis)

[Peet's Coffee](#) (773 Market Street, between 3rd and 4th Street) - Coffee cafe chain offering a variety of coffee drinks & pastries. Open daily from 06:30 to 19:30.

[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 10:00 to 20:30 Monday thru Saturday; 10:00 to 19:00 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 to 21:30 daily.

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

[Spark Social](#) (601 Mission Bay Blvd. North at 4th Street) — food from a variety of gourmet food trucks. \$5-\$15. Open Monday-Saturday 11:00 to 15:00 and Sundays 11:00 to 17:00.

[ParkLab Gardens](#) (1379 4th 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.

[SF Kebab](#) (550 16th Street at 3rd Street) – Mediterranean and Middle-Eastern and Halal food. Open Monday-Saturday 11:00 to 22:00, Sunday 11:00 to 21:00.

[The Ramp](#) (855 Terry Francois Blvd where Mariposa intersects with Illinois Street) – San Francisco favorite with outdoor seating on the waterfront. Appetizers, burgers, sandwiches, salads, fish & chips. \$10-25. Open daily 16:00 to 20:30.

[Mission Rock Resort](#) (817 Terry Francois Blvd just past Mariposa/Illinois Street intersection) – Raw bar, appetizers, salads, burgers and sandwiches, pasta, seafood. Open Monday-Saturday 16:00 to 21:00, Sunday 16:00 to 20:00.

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 @ 16th 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](#) (524 Valencia Street @ 16th) — Amazing Peruvian food. \$12–20.

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

[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

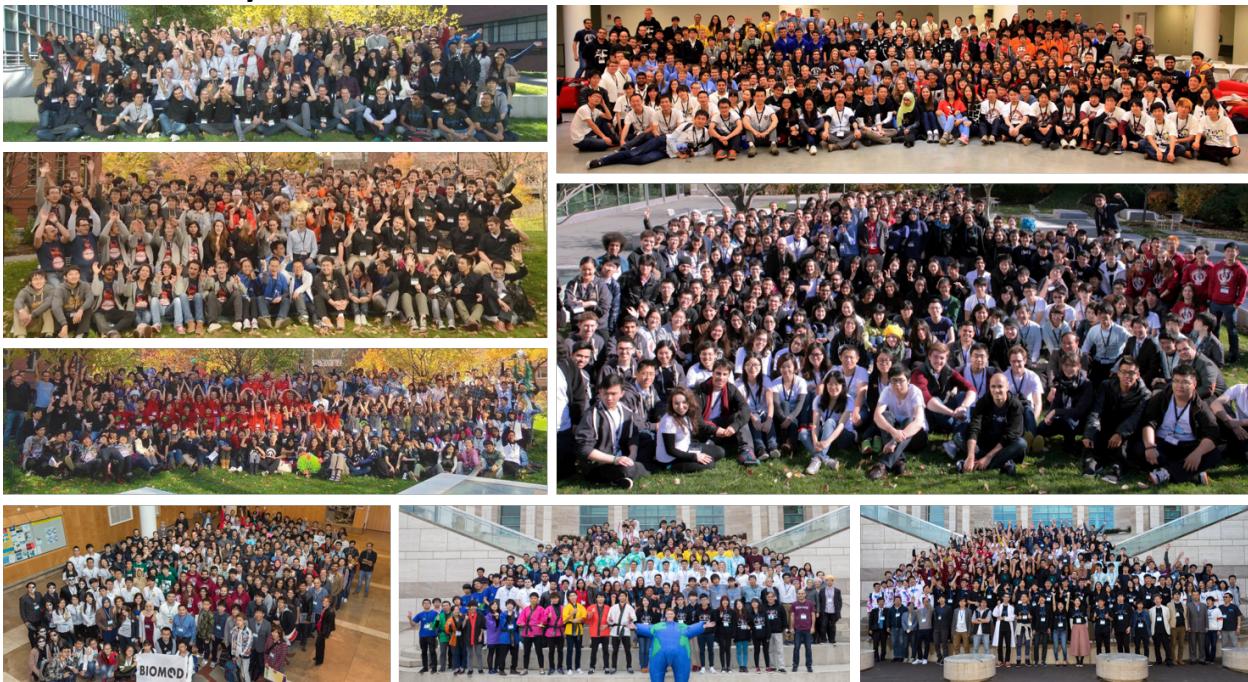
Rebecca Wheeler
cell: +1-650-438-2557
email: rebecca@biomod.net

Shawn Douglas
cell: +1-617-935-7047
email: shawn@biomod.net

2019 BIOMOD Sponsors



BIOMOD History



More than 1500 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 and former BIOMOD Foundation board member), 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) and Mom Keo (volunteer), Robert Pierce (legal), and Akemi Iizuka (accounting/bookkeeping).

This year marks the fourth time that BIOMOD is being hosted in California.