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4/25/2018 7:27:42 AM

EHS Registration	Lab Visiting	Undergraduate	(Open - Ne	w)
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Registration Header | Gerstein, Mark\VisitingUndergrad\MBB\2018-06-19\1

Version 1

Application New

Status Open

Registration Gerstein, Mark\VisitingUndergrad\MBB\2018-06-19\1

Principal Gerstein, Mark

EHS Staff Armstrong, Josh

Application 4/23/2018

7) Review / Report

Visiting Undergraduate Program

Responsible Supervisor

Gerstein, Mark

Program Name

MBB

Program Director

Hochstrasser, Mark

Area(s)/Lab(s)

Select	Building	Lab/Room/Area	Туре	Function
	BASS CENTER	437	Room	N/A

Questionnaire

Biological Materials

Question	Answer
Will research involve any of the following established cell lines or tissues? (If YES, please also include a description of the specific established cell lines to be used, in the box provided.)	No
•Human origin	
•Non-human primate origin	
Will research involve any of the following Biological Materials? (If YES, please also include a description of the specific Biological Materials to be used, in the box provided.)	No
Murine cells in culture	
 Non-exempt rDNA research including defective pathogen vectors in cell culture 	
Exempt rDNA cloning in non-pathogenic E. coli, Bacillus subtilis, Saccharomyces cerevisiae	
Will research involve the collection of or research with arthropods (e.g ticks and mosquitoes)? (If YES, please also include a detailed description of the research activities, in the box provided.)	No
Will research involve working in field settings with potential exposure to ticks and mosquitoes? (If YES,	No
please also include a detailed description of the research activites, in the box provided.)	
Will research involve Risk Group 3 Pathogens? (If YES, please also include a detailed description of the research activites and associated pathogens, in the box provided.)	No

Will research involve the use of Toxins of biological origin with an LD50 of < 100 mg/kg body weight? (If YES, please also include a detailed description of the research activites and associated toxins, in the box provided.)	No
Will research involve the use of non-exempt recombinant or synthetic nucleic acid molecules classified at BSL-2 or higher? (If YES, please also include a detailed description of the research activites and associated vectors, in the box provided.)	Unanswered
(i.e. defective pathogen based vectors such as retroviruses, lentiviruses, and adenoviruses)	
Will research involve the use of Biohazards in animals and/or field work such as trapping and sampling animals in a field setting? (If YES, please also include a detailed description of the research activites, in the box provided.)	No
Will research involve the use of Animal Pathogens? (If YES, please also include a detailed description of the research activites and associated pathogens, in the box provided.)	No
Will research involve the use of Plant Pathogens? (If YES, please also include a detailed description of the research activites and associated pathogens, in the box provided.)	No

Chemical Materials

Question	Answer
Will research involve any of the Chemical Materials listed below? (If YES, please provided a detailed	No
description of the specific chemicals involved and the proposed research activities, in the box provided.)	
Chemical Materials:	
- highly toxic chemicals (LD50 < 50 mg/kg oral-rat)?	
- reactive or pyrophoric materials?	
- carcinogenic materials?	
- human reproductive toxins?	

Controlled Substances

Question	Answer

Will research involve the use of Controlled Substances? (If YES, please provided a detailed description of the specific controlled substances involved and the proposed research activities, in the box provided.)

No

Includes any Schedule I, II, III, and IV drugs

Will the individual(s) listed in this application need to have key access to Controlled Substances? (If YES, please complete the Authorized User Update Form, see link below)

No

Authorized User Update Form Link: http://ehs.yale.edu/sites/default/files/files/controlled-substance-add-remove.pdf

Radiation Producing Equipment

Question	Answer
Will research involve the use of x-Ray producing equipment (e.g. x-Ray Diffraction, portable x-Ray, etc.)? (If YES, please provided a description of the specific x-Ray equipment involved and the proposed	No
research activities, in the box provided.)	

Radioactive Materials

Question	Answer
Will research involve the use of Radioactive Unsealed Sources or are Unsealed Sources present in the laboratory?	No
Will research involve the use of Radioactive Sealed Sources or are Sealed Sources present in the laboratory?	No
Will individual(s) work in an area where other Principal Investigators are authorized to use radioactive materials?	No
Will research involve work at the PET Center (as described below)?	No
PET Radiochemistry	
PET Imaging equipment	
PET Animal Focus	

Lasers	
Question	Answer
Will research involve the use of open-beam Lasers >= Class 3B? (If YES, please provided a description of the specific laser(s) involved and the proposed research activities, in the box provided.)	No
High Magnetic Fields	
Question	Answer
Will research involve the use of High magnetic field equipment (> 5 G)? (If YES, please provided a description of the specific magnetic equipment involved and the proposed research activities, in the box provided.)	No
Physical Materials	
Question	Answer
Will work/research involve electrical hazards associated with work on or near exposed energized parts 50 volts or greater? (If YES, please provide a description of the electrical equipment and the proposed research activities in the box provided.).	No
Will work/research involve the use of Class 3, 4 or 5 Shop equipment? (If YES, please provided a description of the specific shop equipment involved and the proposed research activities, in the box provided.)	No
Animal Research	
Question	Answer
Will research involve the use of live animals? (If YES, please provided a description of the the proposed research activities for which the visitor(s) will be involved, in the box provided.)	No
IRB Activities	
Question	Answer

Will work/research involve Human Subjects?

No

- If the proposed activity involves human subject research, the applicant must complete human subject protection training prior to participating in the proposed activity.
- For more information on human subject protection training and available training options, please visit: http://your.yale.edu/research-support/human-research/education-training/human-research-training or contact HRPP@yale.edu.

Will the student perform activities that are not part of the currently approved IRB Protocol?

No

If yes, amendment to the protocol must be submitted to the IRB for review and approval.

HIPAA Activities

Question	Answer
Will the student be affiliated with YSN, Psychology Department Clinics, or YSM?	No
Excluding the School of Public Health, the Animal Resources Center, and the basic science departments: Cell Biology, Cellular and Molecular Physiology, Comparative Medicine, History of Medicine, Immunobiology, Microbial Pathogenesis, Molecular Biophysics & Biochemistry, Neurobiology, Pharmacology and WM Keck Biotechnology Resources Laboratory.	
Will work/research take place in clinical areas?	No
Will work/research involve patient medical records?	No
Stipends	
Question	Answer

Will the student(s) receive a lump-sum stipend? (If YES, please provide the amount of the proposed stipend and the source of funding, in the box provided.)

The research/clinical experience at Yale is solely for the educational benefit of the student and does not constitute an employment relationship between the student and Yale. The student may not receive any wages or other compensation for any of his or her educational activities at Yale. In limited circumstances, a participant may receive a lump-sum stipend if needed to enable his/her participation in the activity. This must be approved by the provost or designee.

Yes [Answer Comment] There will be a total amount payable \$3137 spaced over 3 payments of \$1,045.66

International Student(s)

Question	Answer
Is the student from a university outside the U.S.?	No
If any of the students listed on this application do not have U.S. citizenship or permanent resident status, then the appropriate visa classification is J-1 Student Intern status.	
The eligibility requirements and application process can be found via the following link: http://oiss.yale.edu/immigration/other-visa-options/j-1-student-intern	
Please contact OISS at (203) 432-2305 for help with international students.	

Certification(s)

Question	Answer
I certify that all the information in this registration is correct to the best of my knowledge.	Yes
I understand that I must request a Yale NetID for all students listed on this application, *if applicable.	Yes
To request a Yale NetID through Yale's Sponsored Identity system, please visit https://sgi.its.yale.edu/sponsoredidentity/sponsoredIdentityCreate. *Note: You do not need to request a NetID for student(s) who have already have one.	
I understand that all EHS Survey and Training Compliance issues must be resolved before the application is approved and the student(s) can enter the lab.	Yes

Overview

Anticipated Start Date

2018-06-19

Anticipated End Date

2018-08-24

Procedures

Select Name

Procedure Name	Procedure Text	Reviewer Comment
Proposed Activities A detailed summary of the educational component of the proposed program. Activities must be educational in nature and must be for the benefit of the student(s).	Complete development of a full-fledged machine learning model for prioritizing structural variations with respect to control and diseased tissue. Implement the model to compute impact scores for cataloged SV's with respect to cancer and perform downstream analysis on the results.	
Supervisory Plan	Week 1-3: techniques to generate, refine and train the ML model	
Please provide a description of the planned oversight for the student's activities and the controls that will help to ensure the safety of the student and the others involved	Week 4-6: Implement the model and compute SV scores for Cancer	
	Week 7-9: Perform downstream analysis	
	Week 10-11: Wrap up project, create documentation and present the work in front of the group	
	Mentor and Mentee will meet regularly to discuss next steps and resolve technical issues encountered during project.	
	Mentee will attend regular group meetings and journal clubs.	
Visiting Undergraduate(s)		

NetID

Birth Date

Work Description

Org

Work Phone

Select Name Org Work Description NetID Birth Date Work Phone

No visting undergraduate(s) found.