



***Welcome to AIMS²(HSI-STEM Grant)- Meeting # 93
Feb 11, 2021, 1 PM – 3:00 PM***





AGENDA

- Welcome and Information Items – Ramesh
- Meetings calendar for spring 2021
- Infographic for AIMS² – Offer from CEEE @ CSULB
- AIMS² Excelencia Student Award Nominations – Josefina and Ramesh
- Year 4 APR Update – Ramesh
- Year 5 Sub-awards – Ramesh and Cristian



Call for Proposals Focused on COVID-19 Response

IEEE HAC/SIGHT Projects



Submission Deadline
01 March 2021



**Humanitarian Activities
Committee**

IEEE SIGHT

Special Interest Group on
Humanitarian Technology

Find all the details at:

hac.ieee.org/funding-opportunities/covid-19-projects

- Food Security
- Infection Control Devices
- Information and Communications Technology (ICT)
- Medical Devices
- Personal Protective Equipment (PPE)
- Sustainable Power Sources
- Water, Sanitation, and Hygiene
- Other pandemic-related topics



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Meetings Calendar for Spring 2021

✓ ***January 14th, 2021***

✓ ***February 11th, 2021***

• ***March 11th, 2021***

• ***April 8th, 2021***

• ***May 13th, 2021***

All meetings on Zoom online

Monthly meetings above are scheduled from 1 PM – 3 PM

• ***April 2021***– Annual Research Symposium, TBD

• ***Week of June 7th*** – Tenth annual external advisory committee meeting



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EXCEL TRANSFER LEARNING COMMUNITIES

The spring 2019 EXCEL Transfer Learning Communities is a semester-long course (NSCI 390) open to all incoming undergraduate transfer students with majors in College of Engineering (COE) or College of Natural Sciences and Mathematics (CNSM). The purpose of the program is to:



Create a community among new spring STEM transfer students



Increase their sense of belonging to the campus



Increase their STEM identity and academic confidence



Provide them with the resources and supports they need to be successful in their first term at CSULB



Students are recruited via email the winter before matriculating, as well as during STEM Transfer Orientation and SOAR.

22

Fall transfer students enrolled in the two NSCI 390 EXCEL Transfer Learning Communities in spring 2019.

KEY FINDINGS FROM POST-SURVEY RESPONSES

SENSE OF BELONGING



84%

of students agreed with the statement "I made friends at CSULB."

In the open-ended responses, one student commented gaining "some very close friends and relations" by being part of the learning community.

ACADEMIC CONFIDENCE

The percentage of students who agreed with the statement "I am good at science" increased

70.8% to 94.4%

In the open-ended responses, one student commented, "This program was amazing at showing me resources & opportunities. I feel a lot more prepared than other peers of mine in CNSM that did not join NSCI 390."

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KNOWLEDGE OF CAMPUS RESOURCES

84%

of students agreed with the statement "I made friends at CSULB."

The percentage of students who reported feeling familiar with the Career Development Center (CDC) increased from:

20.8% to 78.9%

STEM IDENTITY



100%

of students agreed with the statement "I belong in the field of math."



80%

of students agreed with the statement "I belong in the field of science."

In the open-ended responses, one student commented, "I have gained confidence in believing I am in the correct major."



CENTER FOR EVALUATION & EDUCATIONAL EFFECTIVENESS



HSI-STEM
— SÍ PUEDO —



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AIMS² Student Recognition Award

Name: Overall GPA:
(3.0 minimum)

Major: Standing:

Personal attributes:

(responsible, leadership, overcoming academic/personal challenges as demonstrated or reported during faculty mentor meetings; or their participation program activities for community college students).

Program involvement:

(consistently meeting program requirements for CSUN students; meaningful participation in program activities for community college students).

Campus involvement:

(membership in any club, organization, research program, or professional organization).

Community involvement:

(student's involvement in the community and their role).



AGENDA

- AIMS² student recognition awards (Excelencia)
- Nominations from faculty and community college liaisons
- Deadline for nominations: **Friday, March 12, 2021**
- Review Committee (TBD in March)
 - Propose 3 member committee with 2 representatives from CSUN and 1 representative from a partner community college
 - Review nominations and make recommendations
 - Deadline for recommendations: April 8, 2021



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- Supplemental award (AIMS2 Future Teachers in STEM) status update
- Project implementation and timelines – Susan Belgrad
- Project Assessment and Evaluation – Nathan Durdella



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- Project Activities and plans for spring 2021 – CC Project Partners
- College of the Canyons – Amy Foote
- Glendale CC – Chris Herwerth, Shelby McIntyre, Marisela Canela, Freddy Saucedo
- Moorpark College – Trevor Hess
- LA Pierce College – Elizabeth Cheung
- CSUN (February Workshop – Preparing for Graduate School) - Josefina



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DISCUSSION ITEMS

- Planning and logistics for 2021 Research Symposium – Ramesh
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- Faculty Reports* – Faculty Mentors
- Adjourn



Titles for Posters and Oral Presentations

Behzad Bavarian and Lisa Reiner:

Title: Corrosion and corrosion protection of Aluminum alloys for Automotive Applications

Students: Christopher Villalpando, Beatriz Acuna, Emily Rossiter

Kay Hao:

Title: Analysis of Ground Motions and its Application to Earthquake Early-Warning Systems

Names of students: Alex Leong, Jessica Perez, Luke Barella



Titles for Posters and Oral Presentations

Kyle Dewey:

1.) Title: Towards the Sentiment Analysis of Tweets

Students: Joshua Alvarado, Nuelbella Sandoval, Fernando Vargas

2.) Title: Building On the Proteus Programming Language

Students: Eileen Quiroz, Frank Serdenia, Simran Gill

Bingbing Li:

Title of presentation: Generative Design of Cam Plate Optimization for Metal Additive Manufacturing.

Title of poster: Optimization of Cam Support Plate Utilizing CAD software and Generative Design.

Students: Christian Mariscal, Abraham Meiszner, Andrew Langwald, Jason Kim



Titles for Posters and Oral Presentations

John Valdovinos:

Title: Two-dimensional Biomagnetic Model of Cardiac Tissue

Names of students: Ashley Kuhnley, Susanne Fisher, Jessica Frederich, and Robert Salone

Bruno Osorno:

Title: Modeling and Simulation of Electric Vehicles-Solar Energy-Battery systems

Names of students: John Dizon, Lucia Castillo, Farouk Mostafa



Fall 2020-Spring 2021 Research Program

Spring 2021 Research Assistants			
Faculty Mentor	Project	Student Name	Maximum RA hours/week
Bingbing Li	Digital Twin and Metal Additive Manufacturing of Harley Davidson Engine CAM Support	Andrew Langwald	5
		Jason Kim	5
		Abraham Meiszner	5
John Valdovinos	Numerical Models of Magnetocardiogram Field Sensors	Ashley Kuhnley	3
		Alan Cruz	3
Bruno Osorno	Modeling and Simulation of Electric Vehicles-Solar Energy-Battery systems	John Dizon	5
		Farouk Mostafa	5
		Lucia Castillo	3
Behzad Bavarian and Lisa Reiner	Corrosion protection of Aluminum alloys used in Automotive Industries	Beatriz Acuna	5
		Emily Rossiter	5
		Christopher Villalpando	3 hours - 5 hours
Behzad Bavarian and Lisa Reiner	Improving the durability of packaging materials using environmentally friendly vapor phase corrosion inhibitors		
Tzong-Ying(Kay) Hao	Analysis of Strong Ground Motions and its Application to Earthquake Early-Warning Systems	Luke Barella	3
		Alex Leong	5
		Jessica Perez	3 hours - 5 hours
Kyle Dewey	Sentiment Analysis of Tweets	Joshua Alvarado	3
		Fernando Vargas	3
		James Bentley	3
Kyle Dewey	Adding Features to the Proteus Programming Language		
Kyle Dewey	Evaluating Test Suite Generation Techniques for Introductory Computer		



Fall 2020 – Spring 2021 Research Program

- **Open to the cohort, invited guests, and the public**
- **Proposed Dates**
 - **April 7 - 8, 2021**
 - **Split into two sessions (2 hours per session)**
- **Poster session on Day 1 on Spatial Chat**
- **Oral Presentations on Day 2 on Zoom**
- **All student RA's and faculty research mentors should attend the entire symposium**



Proposed Time slots for Sessions

Need two hour slots on each day when all RA's and faculty mentors attend

POSTER SESSION

- April 7 (Wednesday)

3:30 PM – 5:30 PM

4 PM – 6 PM

4:30 PM – 6:30 PM

5 PM – 7 PM

ORAL PRESENTATION

- April 8 (Thursday)

3:30 PM – 5:30 PM

4 PM – 6 PM

4:30 PM – 6:30 PM

5 PM – 7 PM



TryMe / SpatialChat

spatial.chat/s/TryMe

TryMe

- Conference venue 0/50
- Another venue 0/50
- Classroom 0/50
- Meeting Hall 0/50
- Concert 0/50
- Reception 0/50
- Poster session room 2/50**

Ramesh (you)

AS

Need Help?

12:51 PM 1/14/2021

Type here to search

AIMS2 HSI-STEM Meeting # 93



TryMe

- ▶ Conference venue 0/50
- ▶ Another venue 0/50
- ▶ Classroom 0/50
- ▶ Meeting Hall 0/50
- ▶ Concert 0/50
- ▶ Reception 0/50

▼ Poster session room 2/50

R Ramesh (you)

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Massachusetts Health Connector

Background

2008-2014 Uninsurance Rate in Massachusetts

Year	Uninsurance Rate
2008	4.5%
2009	4.2%
2010	4.3%
2011	4.1%
2012	4.0%
2013	4.2%
2014	4.1%

While Massachusetts has the lowest rate of uninsurance in the nation, in the last 6 years the uninsurance rate has remained near 4% of the population.

In order to successfully decrease the uninsurance rate in the state, Massachusetts Health Connector* should focus outreach and enrollment efforts on both those who are uninsured and those who are insured but need to re-enroll into a new health plan. Unless those who are insured re-enroll, they will be uninsured after the end of Open Enrollment 2015.

For the 2015 Open Enrollment the focus was on re-enrolling individuals and families in health insurance plans since 7% of the population (slightly under half a million individuals) were currently insured but needed to re-enroll in a health insurance plan.

Outreach & Enrollment Stage 1 – Open Enrollment 2015

The 2015 Open Enrollment period ran from November 1, 2014 to February 15, 2015. During this period individuals and families could enroll in health insurance. To encourage enrollment in a health insurance plan the Massachusetts Health Connector sent out notices regularly to those who were currently insured but needed to re-enroll in a health insurance plan.

In addition to sending out notices, the Health Connector planned and participated in a number of enrollment events to assist individuals and families apply and enroll in health insurance. Patricia Bergeron, former Boston Bruins hockey star, promoted and attended an enrollment event in Boston.

Furthermore, during Open Enrollment the Health Connector staff worked with Navigator organizations (Navigators are grantees of the Health Connector who work in the community assisting people into health insurance) and Application Assistants to ensure that as many people as possible submitted an application and re-enrolled in health insurance.

Outreach & Enrollment Stage 2 – Understanding Who Did Not Re-Enroll

While Open Enrollment was considered successful overall with over 600,000 people signing up for health insurance, of the 440,000 people who needed to re-enroll only 43% re-enrolled in a health insurance plan.

Percent that Did Not Re-enroll

Category	Percentage
Did Not Re-enroll	57%
Re-enrolled	43%

The next step was to understand who the people were that did not enroll and identify ways to strengthen the current outreach and enrollment strategy to reach those who did not re-enroll in health insurance.

Percent of Those Who Did Not Re-enroll by Age Group

Age Group	Percent
18-24	15%
25-34	14%
35-44	13%
45-54	12%
55-64	11%
65-74	10%
75-84	9%
85+	8%

The top 10 zip codes account for 15% of those who needed to re-enroll during Open Enrollment, together they account for 15% of those who did not re-enroll in a plan.

Language preferences of those who did not re-enroll were reflective of the geographic locations in which people lived. Despite early hypotheses that those who did not re-enroll were non-English speakers, the data shows different with 50% of those who did not re-enroll speaking English. It appears that the common factor across those who did not re-enroll is geographic location and not language.

One of the barriers that may have caused large percentages of the insured population in these geographic areas not to re-enroll was a lack of Health Connector assister organizations in many of these communities. Other barriers are outlined below:

Barrier	Description
Technology	Some communities do not have email addresses which are necessary to email and complete an online application for health insurance.
Health Literacy	Many people do not understand terms like premium, deductible, co-pay, co-insurance or sometimes use of pocket language.
Literacy	Example: The Cape Verdean immigrant population has a low general literacy rate in Massachusetts.
Language	The online application is only available in English with a paper application version in Spanish.
Cultural	Fears that signing up for health insurance will allow the Immigration and Customs Enforcement Agency to identify undocumented individuals.

Outreach & Enrollment Stage 3 – Open Enrollment 2016

Using the results of the enrollment analysis, the Health Connector developed outreach and communication efforts to reach those who did not re-enroll in health insurance in specific geographic regions for the 2016 Open Enrollment period which starts in November of 2016.

The following areas are areas that outreach and enrollment efforts should focus on for the 2016 Open Enrollment period:

This can be done in a number of ways as is outlined in the recommendations below:

Recommendations

1. The Health Connector needs to develop partnerships with community organizations and faith-based organizations in these communities to strengthen future outreach campaigns and reach those who did not re-enroll.
2. Choose Navigator Organizations in these top 10 areas so that they can assist with the online application and help people enroll in health insurance. (In 2015, seven of these areas did not have a Navigator organization in them.)

*Massachusetts Health Connector

The Massachusetts Health Connector is the state-based health insurance marketplace in Massachusetts. It runs the state's health insurance exchange which sells subsidized health insurance plans.

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Cohort Roster (1 of 5)

Aram Khachatourians		
Armando	Briseno	F-2
Ashley	Frisch	F-4
Cristina	Rubalcava	T-4
Garabed	Simitian	F-3
Henry	Reed	F-2
Jason	Marroquin	F-4
Fatima	Serrato	F-3
Kathleen	Molina	F-3
Lesly	Custodio	T-4
Levi	Velasquez	F-2
Adrian	Santamaria	T-5
Daniela	Sanchez	T-5
Heather	Reyes	T-5
Matthew	Awad	T-5
Matthew	Culajay	T-5

Behzad Bavarian		
Anthony	De Leon	T-4
Christopher	Villalpando	T-3
Daniel	Olvera	T-3
Emilio	Aguilar	T-4
Meroujan	Bagdadian	T-5
Jasmin	Ortiz	T-5
Stefany	Fuentes Melgar	T-5
Verania	Ceja Franco	F-2
Steve	Gonzalez	T-5



Cohort Roster (2 of 5)

John Valdovinos		
Alan	Cruz	F-2
Armando	Herrera	F-2
Bryan	Lam	F-3
Alyssa	Tompkins-Webb	T-5
Francisco	Ramos	T-4
Jozsef	Feher	T-5
Kyle	Rietta	T-3
Nuelbella	Sandoval	F-3
Jessica	Frederich	T-5
Rojelio	Bejar	T-4
Luis	Ochoa	T-5
Maria	Zinkewich	T-5
Robert	Salone	T-5

Kyle Dewey		
Briana	Pimentel	F-3
Diego	Barreto	T-3
Eileen	Quiroz	F-2
Emmanuel	Galindo Cisneros	F-3
Fernando	Vargas	F-3
Isaiah	Martinez	F-3
Jennifer	Glover	T-4
Josue	Vega	T-3
Kavya	Manohar	F-2
Miguel	Hernandez	F-4
Mimi	Schirm	T-4
Rocio	Zavala	F-2
Samantha	Ramirez	F-4
Samuel	Ochoa	F-1
Victor	Pineda	T-3
Hanna	Zelaya	F-1



Cohort Roster (3 of 5)

Bingbing Li		
Abraham	Meiszner	T-4
Andy	Sanchez	F-3
Anthony	Vasquez	F-3
Christian	Mariscal	F-1
Eswin	Amaya	F-3
Andrew	Ramirez	T-5
Deion	Shallenberger	T-5
Jason	Kim	F-3
Gerardo	Baron Diaz	T-5
Randy	Herrera	T-5
Tomothy	Tran	T-5
Megan	Ngo	F-3
Noe	Diaz	T-4

Bruno Osorno		
Beatriz	Acuna	F-1
Albert	Rivas	T-5
Erica	Garcia	F-4
Fernando	Landeros	F-3
Cesar	Villa	T-5
Damien	Lopez	T-5
Hector	Mata	T-4
Faizan	Hussain	T-5
Jessirae	Bufford	T-5
John	Dizon	T-4
Jose	Cervantes	F-3
Joshua	Salas	F-4
Yolanda	Camarena	T-5
Samuel	Garza	T-3



Cohort Roster (4 of 5)

Ruting Jia		
Areesha	Hussain	F-4
Frank Joseph	Serdenia	T-4
George	Lopez	F-4
Jairo	Zelaya	T-4
Jake	Lyon	T-3
Joshua	Alvarado	F-4
Kaylee	Pham	T-4
Lousia	Manoael	T-4
Meyer	Millman	F-3
Miles	Rodas	F-4
Pedro	Moran	F-4
Simran	Gill	T-4
Tiffany-Ziba	Haghighi	F-3
Kelvin	Martinez	T-5

Kay Hao		
Ezekiel	Castelo	T-5
Aaron	Palacios-Romero	T-3
Ariana	Oliva	T-5
Andrew	Langwald	F-2
Gerardo	Reyes	F-3
Peter	Messiha	F-3
Richard	Gomez	F-3
Alexander	Rivera	T-4
Elizabeth	Esquivel	T-4
Jennifer	De Avila	T-4
Kathleen	Lee	T-4
Richard	Rivas	T-4
Tracy	Albers	T-4



Cohort Roster (5 of 5)

Ali Amini		
Alireza	Bahmanabadi	T-2
Mehdi	Miri	T-5
Ashley	Kuhnley	T-4
Sabrina	Motto	T-5
Elvis	Chino-Islas	F-3
Gloria	Santamaria	T-4
Kimberly	Ortiz	F-3
Lavar	Watkins II	F-4
Javier	Valle	T-5
Mario	Giron	T-5
Suzanne	Fisher	T-5

Anwar Alroomi		
Alexis	Sierra	F-2
Leonard	Fitzpatrick	T-5
Oscar	Lopez Bahena	T-5
Debbie	Altamirano	T-4
Emmanuel	Ayala	T-3
Evelyn	Villalobos	T-4
Iris	Guerrero Morales	F-4
Jonathan	Salcedo-Manriquez	T-4
Juan	Espericueta	F-3
Luis	Flores	F-4
Mauricio	Rodriguez	T-3
Omar	Ponce	T-3
Teny	Shahjahanian	F-2
Marleny	Lopez	T-5



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