



2021 SURF Symposium



OFFICE OF UNDERGRADUATE RESEARCH
LAMAR UNIVERSITY

KALEN BAKER

Major in Mechanical Engineering

Mentor: Dr. Ping He

Assistant Professor of Mechanical Engineering

Research in Mechanical Engineering and Physics

*“Theoretical Research on Sintering of Metals Based on Results of
Molecular Simulations”*



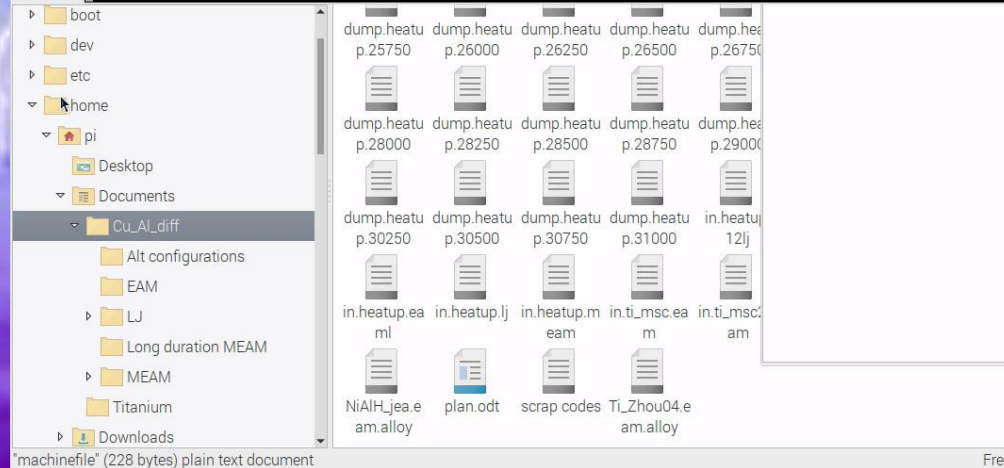
KALEN BAKER



MARCH 24, 2021

KALEN BAKER AND DR. PING HE

```
pi@node1: ~  
└─$ cd Cu_AI_diff  
└─$ ./machinefile - Mousep...  
└─$  
Tras  
File Edit Tabs Help  
Bond 0 0 0 0.0 0.00  
Neigh 0 0 0 0.0 0.00  
Comm 0 0 0 0.0 0.00  
Output 0 0 0 0.0 0.00  
Modify 0 0 0 0.0 0.00  
Other 5.007e-06 0 100.00  
  
Nlocal: 32000 ave 32000 max 32000 min  
Histogram: 1 0 0 0 0 0 0 0 0  
Nghost: 26825 ave 26825 max 26825 min  
Histogram: 1 0 0 0 0 0 0 0 0  
Neighs: 2.24e+06 ave 2.24e+06 max 2.24e+06 min  
Histogram: 1 0 0 0 0 0 0 0 0  
  
Total # of neighbors = 2240000  
Ave neighs/atom = 70  
Ave special neighs/atom = 0  
Neighbor list builds = 0  
Dangerous builds = 0  
WARNING: No fixes defined, atoms won't move (./verlet.cpp:52)  
Setting up Verlet run ...  
Unit style : metal  
Current step : 0  
Time step : 0.001  
Per MPI rank memory allocation (min/avg/max) = 32.05 | 32.05 | 32.05 Mbytes  
Step Temp E_pair E_mol TotEng Press  
0 500 -153562.47 147.98202
```



AUGUST 5, 2021



2021 SURF Symposium



OFFICE OF UNDERGRADUATE RESEARCH
LAMAR UNIVERSITY

ALEXANDER BAHRIM

Major in Electrical Engineering

Mentors: Dr. Gleb Tcheslavski

Associate Professor and Chair of Electrical Engineering

Dr. Cristian Bahrim

Professor of Physics



Research in Electrical Engineering and Physics

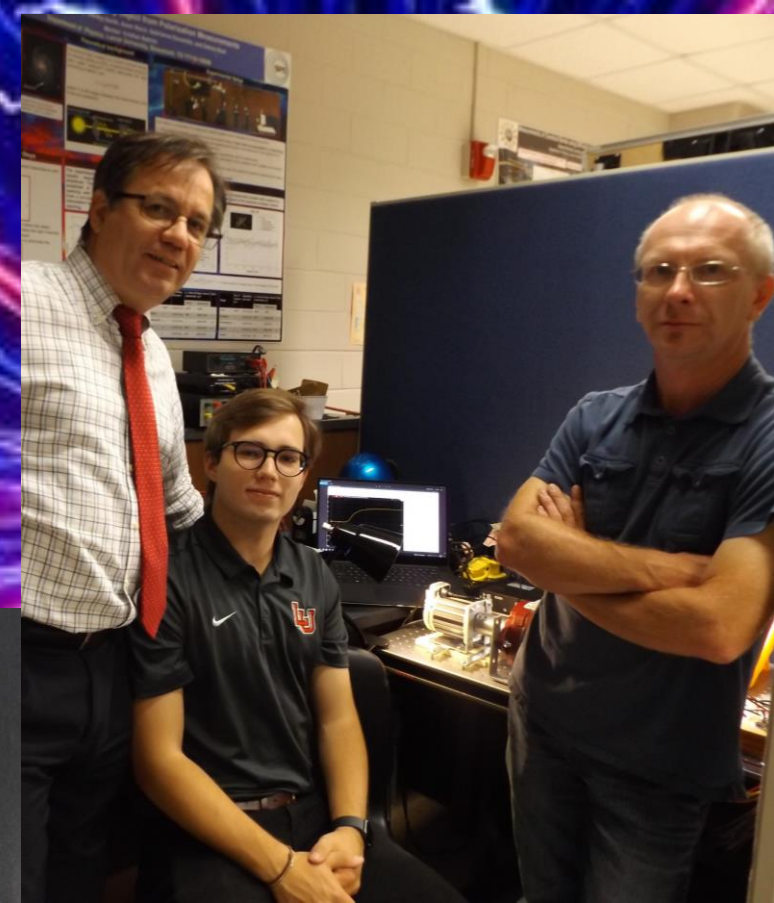
“Development and assessment of hardware model for studying the mechanism of Regenerative Braking System (RBS)”

ALEXANDER BAHRIM



MARCH 24, 2021

ALEXANDER BAHRIM
DR. GLEB TCHESLAVSKI
DR. CRISTIAN BAHRIM



AUGUST 5, 2021



2021 SURF Symposium



OFFICE OF UNDERGRADUATE RESEARCH
LAMAR UNIVERSITY

CYMONÉ HOUSTON

*Major in Civil and Environmental
Engineering*

Mentor: Dr. Thinesh Selvaratnam

*Assistant Professor of Civil and
Environmental Engineering*



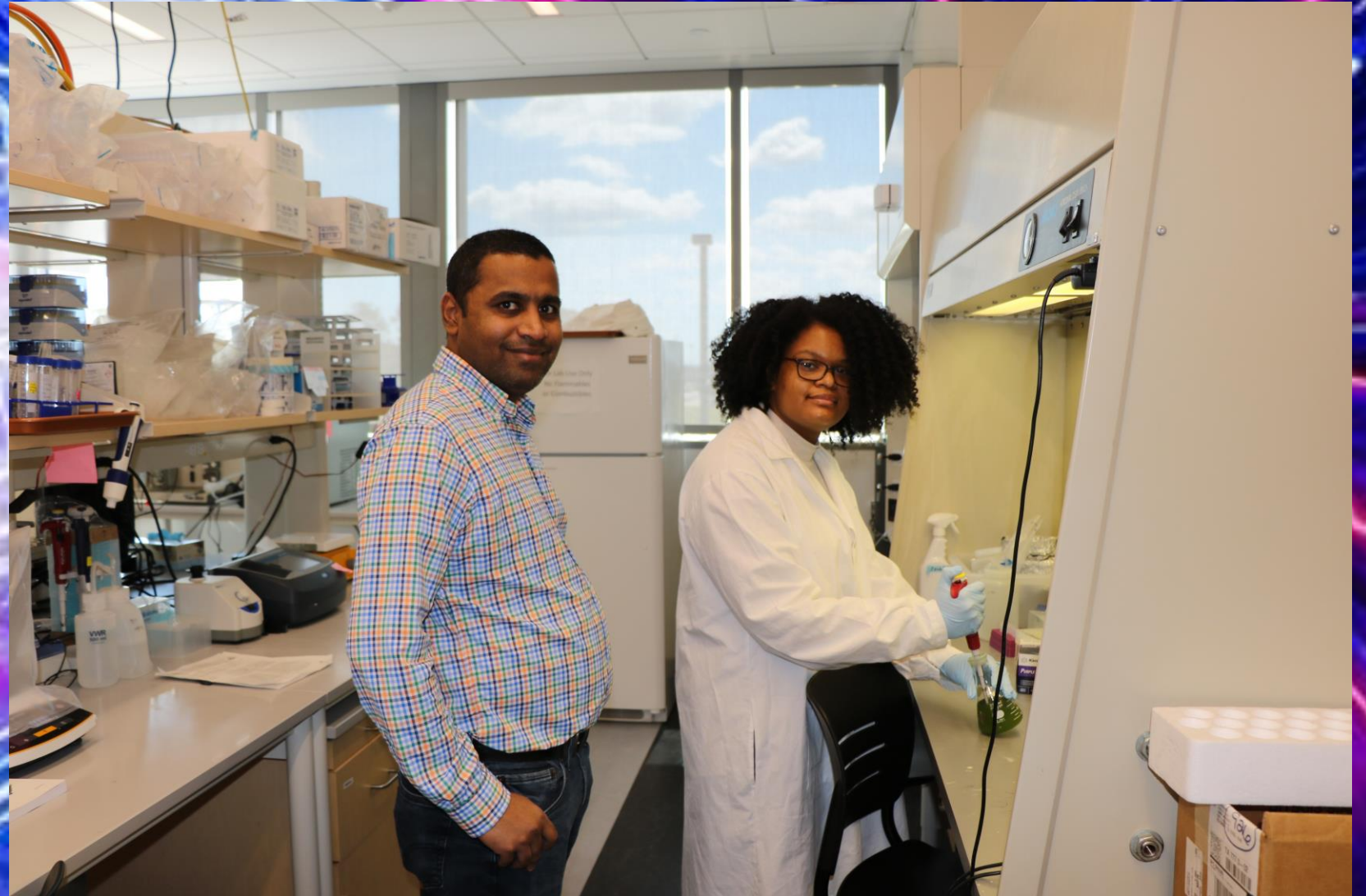
*Research in Environmental Sciences
“Biological Treatment of Produced Water”*

CYMONÉ HOUSTON



MARCH 24, 2021

CYMONÉ HOUSTON
AND DR. THINESH
SELVARATNAM



MARCH 3, 2021



2021 SURF Symposium



OFFICE OF UNDERGRADUATE RESEARCH
LAMAR UNIVERSITY

MELISSA TAN

*Major in Civil and Environmental
Engineering*

Mentor: Dr. Thinesh Selvaratnam

*Assistant Professor of Civil and
Environmental Engineering*

Research in Environmental Sciences

*“Studying the Extracellular Polymeric Substances of Galdieria Sulphuraria
as Flocculation Aid for Improving Algal Harvesting Efficiency”*

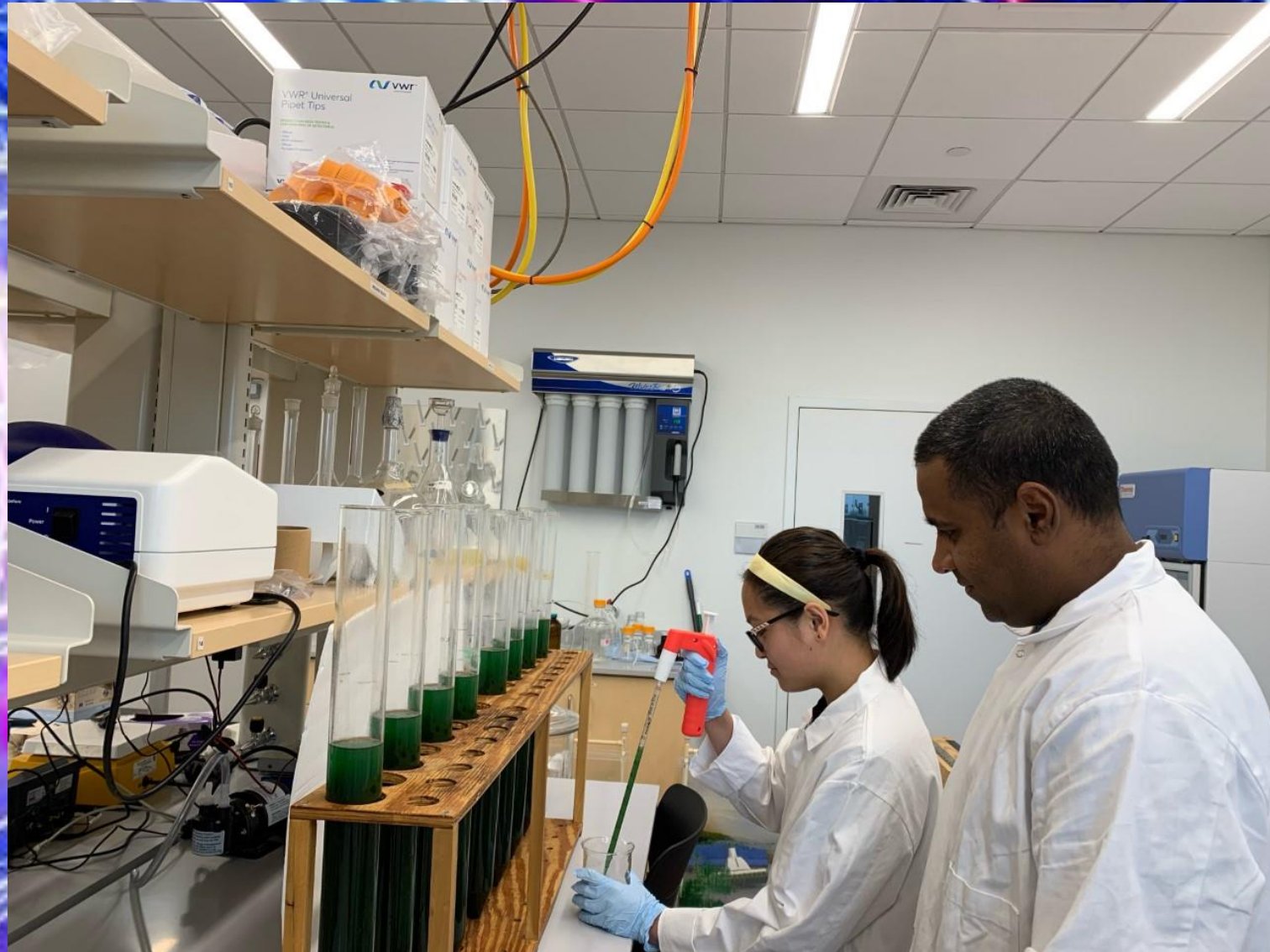


MELISSA TAN



MARCH 24, 2021

**MELISSA TAN
AND DR. THINESH
SELVARATNAM**



AUGUST 3, 2021



2021 SURF Symposium



OFFICE OF UNDERGRADUATE RESEARCH
LAMAR UNIVERSITY

GABRIEL WEST

Major in Mechanical Engineering

Mentors: Dr. Sushil Doranga

Visiting Assistant Professor of Mechanical Engineering

Dr. Jenny Zhou

Professor & Interim Chair, Mechanical Engineering



Research in Mechanical Engineering

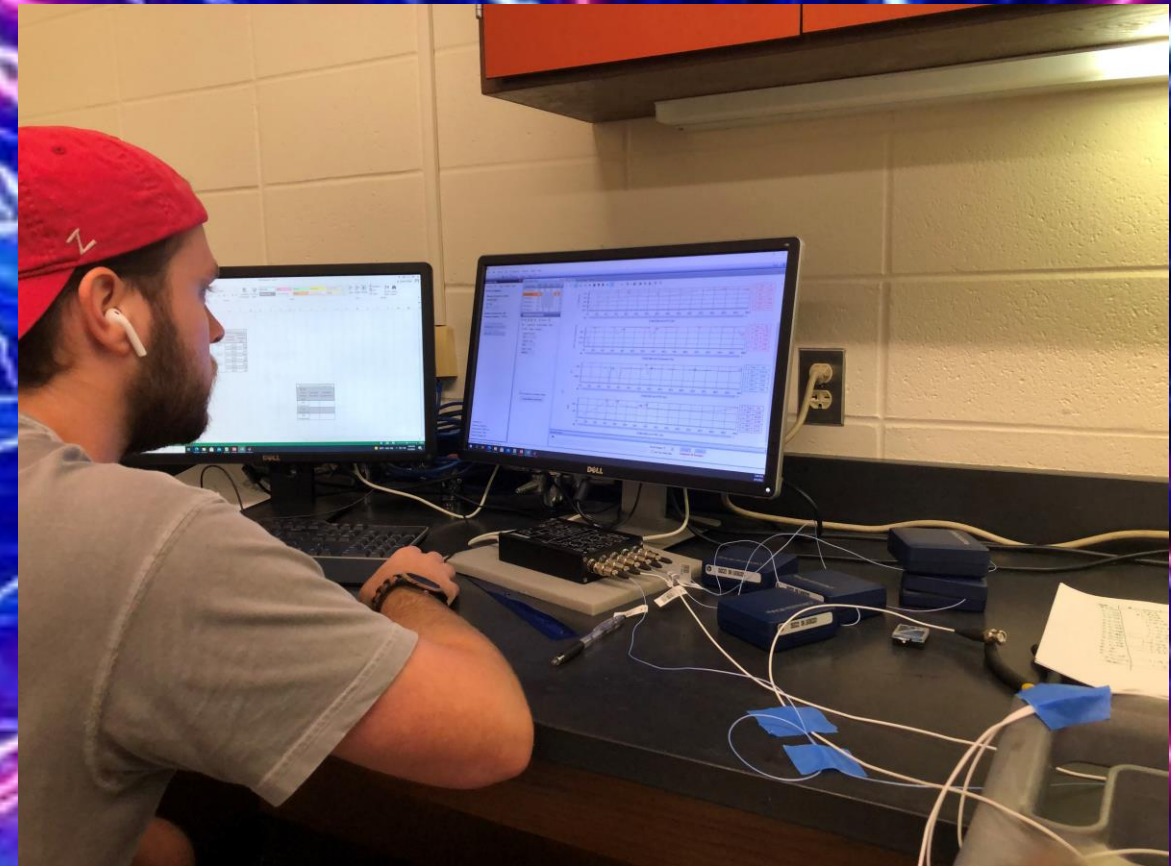
“Vibration Response Prediction of Printed Circuit Boards Used in the Transportation Industry”

GABRIEL WEST



MARCH 24, 2021

GABRIEL WEST



AUGUST 6, 2021



2021 SURF Symposium



OFFICE OF UNDERGRADUATE RESEARCH
LAMAR UNIVERSITY

DAMARIS THRASH

Major in Exercise Science

Mentor: Dr. Shannon Jordan

Assistant Professor of Health and Kinesiology



Research in Exercise Science

“Effects of Motivational Music on Post-Exercise Recovery”

DAMARIS THRASH



MARCH 24, 2021

**DAMARIS THRASH
AND DR. SHANNON JORDAN**



AUGUST 3, 2021



2021 SURF Symposium



OFFICE OF UNDERGRADUATE RESEARCH
LAMAR UNIVERSITY

OLUWATOMISIN EGBEWALE

Major in Computer Science

Mentors: Dr. Sujing Wang

Associate Professor of Computer Science

Dr. Xingya Liu

Assistant Professor of Computer Science



Research in Computer Science

“Security evaluation of a cloud-based biometric authentication system “

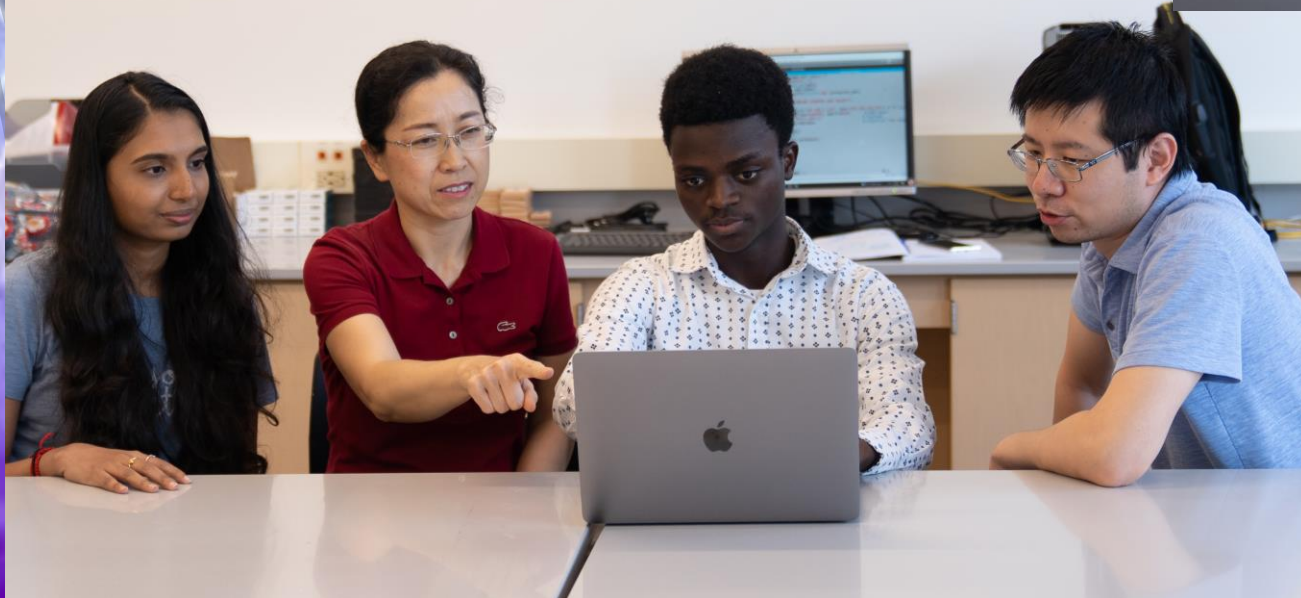
OLUWATOMISIN EGBEWALE



MARCH 24, 2021



**OLUWATOMISIN EGBEDALE,
DR. SUJING WANG AND
DR. XINGYA LIU**



AUGUST 3, 2021



2021 SURF Symposium



OFFICE OF UNDERGRADUATE RESEARCH
LAMAR UNIVERSITY

CALLAN NOAK

Major in Computer Science

Mentor: Dr. Sujing Wang

Associate Professor of Computer Science



Research in Computer Science

“Design Regression Models for Covid-19 Risk Prevention”

CALLAN NOAK



MARCH 24, 2021

CALLAN NOAK AND
DR. SUJING WANG



AUGUST 2, 2021



2021 SURF Symposium



OFFICE OF UNDERGRADUATE RESEARCH
LAMAR UNIVERSITY

NYAH SCIARRILLA

*Majors in Biology &
Speech and Hearing Sciences*

Mentor: Dr. Matthew Hoch
*Associate Professor of Aquatic and
Microbial Ecology
Center for Coastal and Marine Studies*



Research in Biology

“The Effect of Starch Copper Oxide Nanoparticles on Differential Growth of Microbial Populations in Aquatic Environments”

NYAH SCIARRILLA



MARCH 24, 2021

**NYAH SCIARRILLA
DR. MATT HOCH**



AUGUST 5, 2021



2021 SURF Symposium



OFFICE OF UNDERGRADUATE RESEARCH
LAMAR UNIVERSITY

CARISSA SLAUGHTER

Major in Biology

Mentor: Ashwini S. Kucknoor
Associate Professor of Biology



Research in Microbiology and Parasite Immunology
“Trichomonas Vaginalis Induced Toll-like Receptor Gene
Expression in Cervical Epithelial Cells ”

CARISSA SLAUGHTER



OFFICE OF UNDERGRADUATE RESEARCH
LAMAR UNIVERSITY

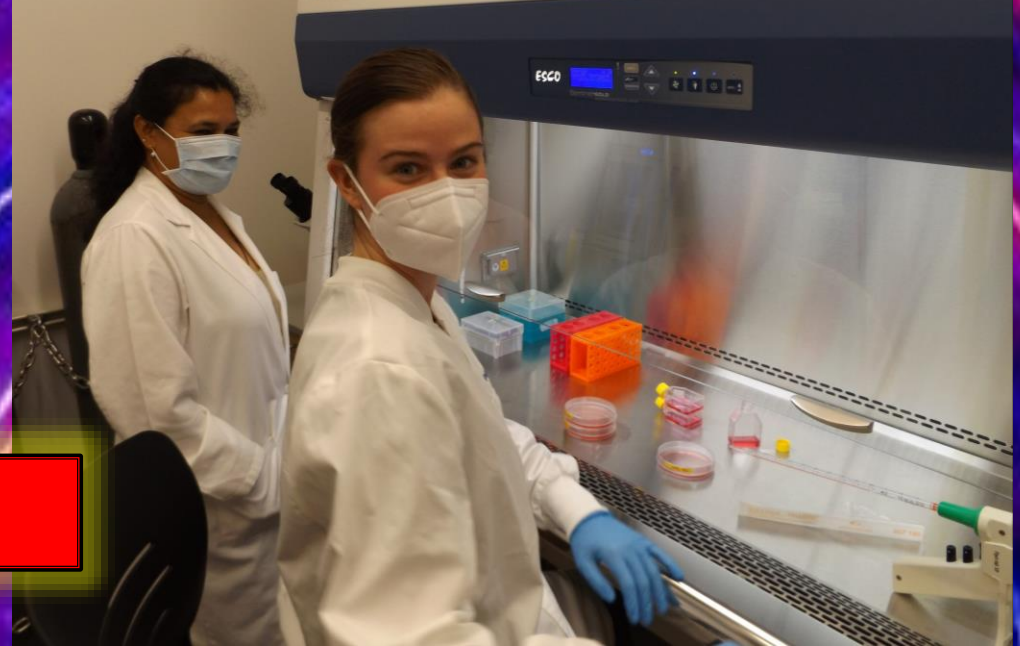
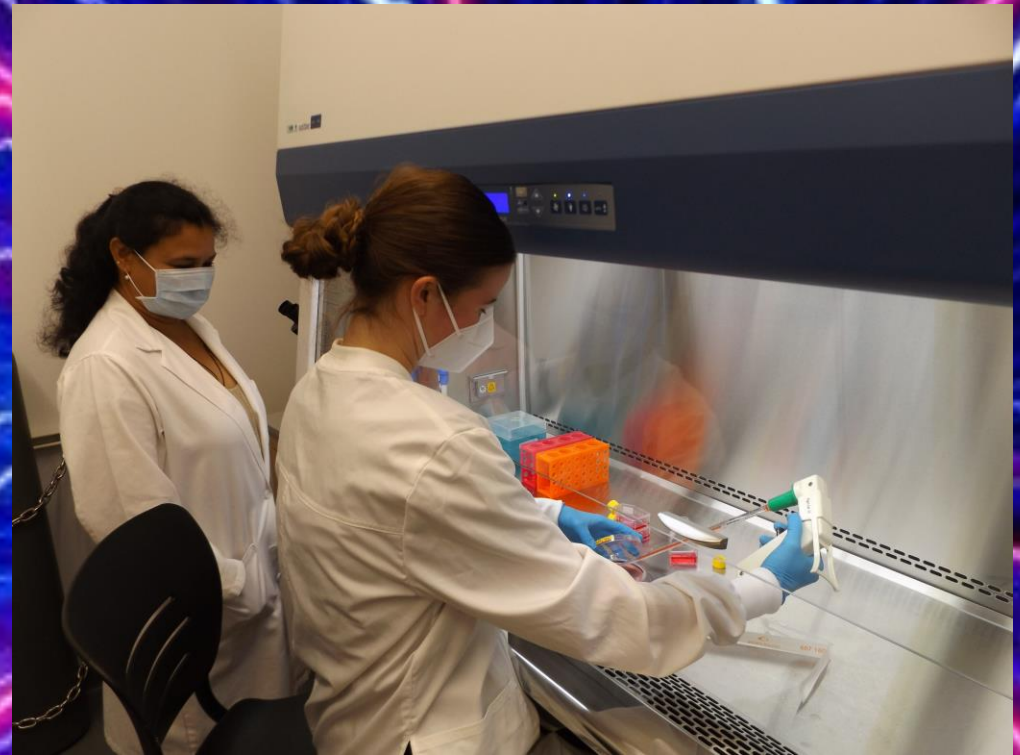


MARCH 24, 2021

**CARISSA SLAUGHTER
DR. ASHWINI KUCKNOOR**



AUGUST 5, 2021





OFFICE OF UNDERGRADUATE RESEARCH
LAMAR UNIVERSITY



2021 SURF Symposium



DANIELLE SOILEAU

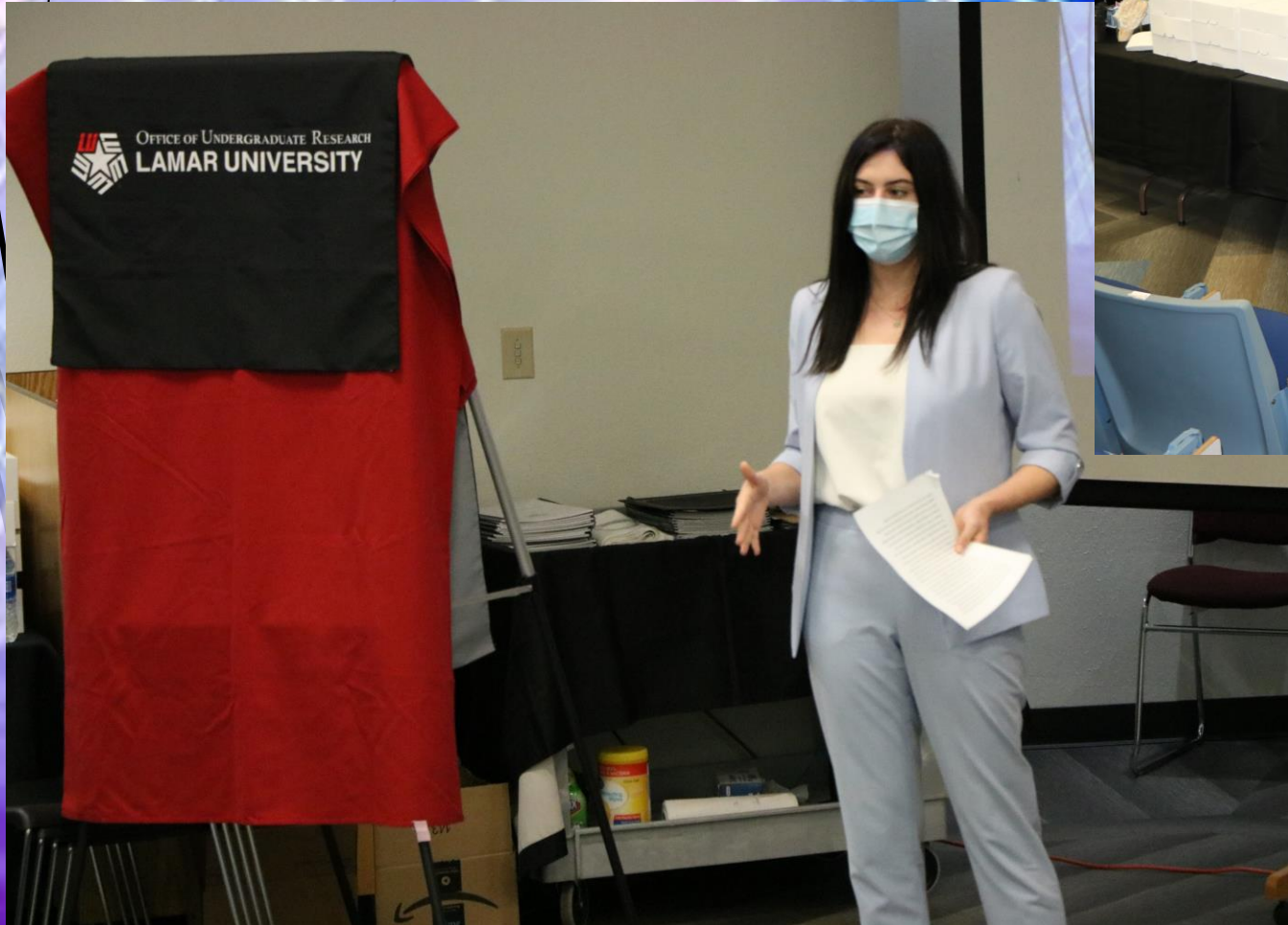
Major in Biology

Mentor: Ashwini S. Kucknoor
Associate Professor of Biology



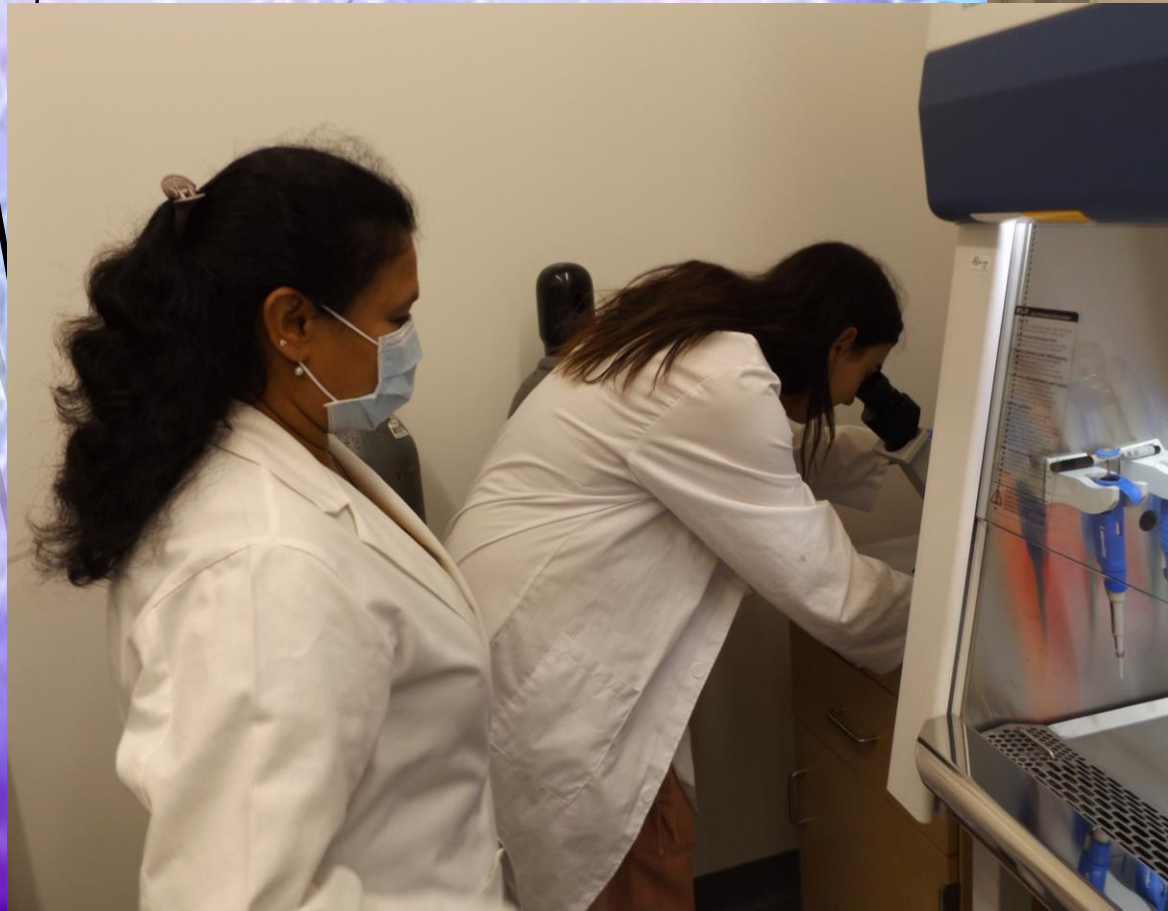
Research in Microbiology and Parasite Immunology
*“Characterization of a Novel Cell Surface Protein Coding Gene,
TfAD1 in Tritrichomonas Foetus, a Cattle Pathogen”*

DANIELLE SOILEAU



MARCH 24, 2021

**DANIELLE SOILEAU
DR. ASHWINI KUCKNOOR**



AUGUST 5, 2021



2021 SURF Symposium



OFFICE OF UNDERGRADUATE RESEARCH
LAMAR UNIVERSITY

CESAR "C.J." DELGADO

*Major in English and Modern
Languages*

Mentors: Mr. Andre Favors

Instructor of Communication and Media

Mr. O'Brien Stanley

Professor of Communication and Media



Research in Intercultural Languages

" Cultural Identity and Digital Citizenship: How Do Social Media Consumers and Creators Reconcile their Identities in the Digital World"

CESAR "C.J." DELGADO



MARCH 24, 2021

**CESAR DELGADO
PROF. ANDRE FAVORS
PROF. O'BRIEN STANLEY**



AUGUST 5, 2021



2021 SURF Symposium



OFFICE OF UNDERGRADUATE RESEARCH
LAMAR UNIVERSITY



KINLEE BUESING
MADISON FONDREN

Speech and Hearing Sciences

Mentor: Dr. Jamie Azios
*Assistant Professor of Speech and Hearing
Sciences*



Research in Speech and Hearing Sciences

“Where are my friends?” A narrative inquiry of friendship maintenance and dissolution in the early period post-stroke and aphasia.

**KINLEE BUESING
MADISON FONDREN**



MARCH 24, 2021

**KINLEE BUESING
MADISON FONDREN
DR. JAMIE AZIOS**

SURF 2021 Friendship after aphaasia

	A	B	C
28	2006	V. Greene	Conquering Stroke
29	2006	V. Greene	Conquering Stroke
30	2006	V. Greene	Conquering Stroke
31	2006	V. Greene	Conquering Stroke
32	2006	V. Greene	Conquering Stroke
33	2006	V. Greene	Conquering Stroke
34	2006	V. Greene	Conquering Stroke
35	2006	V. Greene	Conquering Stroke
36	2006	V. Greene	Conquering Stroke
37	2006	V. Greene	Conquering Stroke
38	2006	V. Greene	Conquering Stroke
39	2006	V. Greene	Conquering Stroke
40	2006	V. Greene	Conquering Stroke
41	2006	V. Greene	Conquering Stroke
42	2006	V. Greene	Conquering Stroke
43	2006	V. Greene	Conquering Stroke
44	2006	V. Greene	Conquering Stroke

That's why the single most important thing that you can do right now for the patient—and for yourself—is not to buy into anyone's negativity. Although no one knows what the future will bring, studies show that the extent of recovery is influenced by the...

...with the 20 "I wasn't even a year after, while working on my another trauma, that I was able to forgive them. It brought it early to see how beautiful they must have been, and how...

In all honesty, taking my life had entered my mind. Though I knew I would be greatly missed by my family and friends, I hoped that they would understand. This person I had become just wasn't me. Not only did I look dreadful, I couldn't even talk. Uncannily, the very next day my friend Tom came by and offered to take me out to lunch on a regular basis. Oh, dear, now what? I was torn. My th...

The weeks passed, and my feelings of isolation grew. I decided to ask a friend to arrange for a limousine to pick me up and take me out for the evening. If I had learned one thing from my stroke, it...

One morning, to my surprise, a truck pulled up in the driveway. It was Milton! He had come to fulfill his promise to help me. "Val, I'm here to take you to a special doctor I know," he said. Of all my...

A few days passed, and my friends Lori and Helen, business and golfing buddies, heard of my need. Helen owned an Allstate Insurance agency in Winter Park, and Lori was a broker with a large ins...

Mail started to arrive from home. I was so anxious to receive word from my family and friends, and the cost of making or receiving international phone calls was outrageous. Not that it really matt...

I decided to have one last party in my home. Close friends agreed to invite all the guests and arrange for the food. I was in charge of decorating the house.

Some of my guests were unknown to me and had been invited by my friends. One of them, Missy, took the time to have a conversation with me, really listening so she could understand what I was...

It was a great blessing to me that my friend Cindy, in Seattle, invited me to stay with her for a few months. She was retiring and wanted to show this Florida girl the great Northwest. I packed my c...

My stroke had reduced the number of people I could reach, but the friends of the new one made up for the loss of old ones. Gains and losses related the emotional roller coaster of stroke recovery.

Rhonda was another close friend who sustained me through that time. We had been close since high school, and she often wrote me letters that offered compassion, loyalty, and support. Over the...

There were other friends as well. One friend, Andy, had a hat that he wore to work. One day he was wearing it, and he was talking to me. I was sitting at the computer, and he was talking to me. I was...

Andy ignored his hat and dove back into the cold water again, this time resurfacing with the camera. "The lens, Andy! Do you think you can find the lens?" True friend that he is, Andy dove again a...

After the drama of life or death is over come the daily hospital visits, the long list of responsibilities to be shared, and so much to learn. After a while, friends and neighbors stop bringing over the...

Unfortunately, there are no rituals for the loss of the person taken away by a stroke, and caregivers have difficulty finding an appropriate way to express their loss. Instead, they tend to mask their...

...to handle.

...we do not know what we can endure.

...free to ask, "Tell me about it. What does it look like?"

...This she did, explaining to them, "Sometimes I can't think of the words to describe it, but for the stroke that took Steve's life, it felt like the only one who had been there for me was Steve. He had been in our new home before he moved on, in saying good-bye to him, I felt as if I had lost my best friend.

...on Wednesday, October 5 at 3:00 PM. I also had a friend who brought soup for dinner on Wednesday.

...but trying to write an entire sentence, I understood what it meant. Breakfast with Steve was my first outing since...

...with 27 recordings, packed the month. Several friends visited as well.

...I had sent a number of texts and emails to friends, family, and colleagues even while still at the hospital. I di...

...of sorts." A few friends visited and I visited a few doctors.

...ed Fish in Waltham.

...is a moving truck. Our daughter and a friend came with us to help drive.

...nters, family, and friends.

...e that night, just to be there with us.

...y with anyone else.



AUGUST 3, 2021



2021 SURF Symposium



OFFICE OF UNDERGRADUATE RESEARCH
LAMAR UNIVERSITY

CHLOE SMITH

*Major in Speech and Hearing
Sciences*

Mentor: Dr. Monica Harn

*Professor and Chair of the Department
of Speech and Hearing Sciences*



Research in Speech and Hearing Sciences

*“A Cross-Sectional Study of the Portrayal of Childhood Speech
Sound Disorder Interventions in YouTube Videos”*

CHLOE SMITH



MARCH 24, 2021

CHLOE SMITH



AUGUST 5, 2021



2021 SURF Symposium



OFFICE OF UNDERGRADUATE RESEARCH
LAMAR UNIVERSITY

VIVIANA DENOVA

*Major in Finances and Business
Management*

Mentor: Dr. Gevorg Sargsyan
Assistant Professor of Finance



Research in Finances and Business Management
*“The Financial Impact of COVID-19 on Businesses in Dining and
Hospitality Industries in Southeast Texas”*

VIVIANA DENOVA



MARCH 24, 2021