

MONDAY

March 18th

8 -9:00 am Breakfast Diamond Ballroom Foyer

9 - 9:10 am Morning Introduction Diamond I Ballroom
Xiaogang Ma

9:10 am - noon **RESEARCH PRESENTATIONS** Diamond I Ballroom
Interacting Factors in Tick-Borne Diseases

9:10 am **Spatiotemporal Association between Lyme Disease Occurrence and Environmental Factors** - Meifang Li (Dartmouth)
Collaborators: Xun Shi, Xiang Que, Zhe Wang, Zhuoming Liu, Dorothy Wallace, Jonathon Winter, Joseph Savage, Yan Lin, Chao Fan, Xiaogang Ma

9:35 am **Assessing Lyme Disease and Landscape Fragmentation Dynamics Using Spatiotemporally Weighted Regression (STWR): A Town-Level Study in Connecticut** - Zhe Wang (U of I)

10:00 am **Impact of climatic, landscape, and social vulnerability determinants on Rocky Mountain Spotted Fever in Arizona** - Al Ekram Hridoy (UNM)
Collaborators: Yan Lin, Meifang Li, Zhe Wang, Zhuoming Liu, Murphy John, Xi Gong, Li Luo, Chao Fan, Irene Ruberto, Xun Shi

10:25 am **UNR Tick Updates** - Andrew Nuss (UNR)
Collaborators: Mike Teglas, Monika Gulia-Nuss, Claudia Rueckert, Fred Harris

10:50 am **BREAK**

11:05 am **Tick Genomics** - Molly McVicar (UNR)
Collaborators: Monika Gulia-Nuss

11:30 am **Generative AI in STEM Based Video Games** - Barrie Robison(U of I)

12 - 1:00 pm Sponsored Lunch Diamond Ballroom Foyer

1 - 1:30 pm Free Time

1:30 - 3:30 pm **RESEARCH PRESENTATIONS** Diamond I Ballroom
Data Science Related Topics

1:30 pm **A Large Language Model Application in Earth and Environmental Science Data Analysis** - Jiyin Zhang (U of I)

1:52 pm **A New Recommender System for Open Data with Trust Ranking and Social Trust Network** - Chenhao Li (U of I)

2:14 pm **TickTrax: A Mobile and Web-Based Application for Tick Monitoring and Analysis** - Joanna Lopez (UNR)
Collaborators: Denielle Oliva, Ryan Dahan, Rohman Sultan, Joanna Lopez, Monika Gulia-Nuss, Andrew B. Nuss, Mike B. Teglas, David Feil-Seifer, Frederick C. Harris Jr.

2:36 pm **Procedure of using GPS data to estimate environmental exposure** - Zuoming Liu (UNM)
Collaborators: Al Ekram Elahee Hridoy, Yan Lin, Zhe Wang, Xiang Que, Meifang Li

2:58 pm **Using AI to Enable Modern Semantic Search with TickBase** - Luke Sheneman (U of I)
Collaborators: John Brunsfeld, Zhuoming Liu, Yan Lin, Al Ekram Elahee Hridoy

3:30 - 5:00 pm **POSTER SESSION** Diamond I Ballroom

Brief poster presentations followed by open discussion and Best Poster Award.

*See detailed poster information on page 4.

5:45 - 6:30 pm Reception The Atrium

6:30 - 7:30 pm Sponsored Dinner The Atrium

TUESDAY

March 19th

8 -9:00 am Breakfast Diamond Ballroom Foyer

9 - 9:10 am **Morning Introduction** Diamond I Ballroom
Xiaogang Ma

9:15 am - noon **SUSTAINABILITY PLANNING** Diamond I Ballroom

9:15 am **PI and Co-PI Panel**
Xiaogang Ma, Xun Shi, Barrie Robison, Yan Lin, and Andrew Nuss

10:15 am **Breakout Groups**
Groups will utilize the Diamond I Ballroom, Willsboro and Valcour Rooms as needed

11:15 am **Breakout Groups Report Back**

12 - 1:00 pm Sponsored Lunch Diamond Ballroom Foyer

1 - 1:30 pm Free Time

1:30 - 3:15 pm **Group Sustainability Discussion and Vote**

3:15 - 3:30 pm **BREAK**

3:30 pm **Reporting Overview**
NSF E-DOCS

4:00 pm **Closing Remarks**
Xiaogang Ma

4:05 - 5:00 pm **Evaluator Focus Session with Objective Leads** (by invitation only)

5:00 PM Dinner on your own

POSTERS

Diamond I Ballroom

1

Joshua Dahl (UNR) and Erik Marsh (UNR), *Drider: Teaching Students about the Dangers of Ticks the Fun Way*

2

Al Ekram Hridoy (UNM) and Zhuoming (Leo) Liu (UNM), *A pilot model combining GPS and environmental data to examine dog-tick interactions in Ramah Navajo Nation*
Collaborators: Yan Lin, Al Ekram Hridoy, Zhuoming Liu

3

Murphy John (UNM), *Spotted Fever Rickettsiosis Dynamics in the United States*
Presented by Dr. Yan Lin on behalf of their student

4

Chenhao Li (U of I), *A New Recommender System for Open Data with Trust Ranking and Social Trust Network*

5

Joanna Lopez (UNR), *TickTrax: A Mobile and Web-Based Application for Tick Monitoring and Analysis*
Collaborators: Denielle Oliva, Ryan Dahan, Rohman Sultan, Joanna Lopez, Monika Gulia-Nuss, Andrew B. Nuss, Mike B. Teglas, David Feil-Seifer, Frederick C. Harris Jr

6

Zeynab Maghsoudi (UNR), *TICKDB: TICK-Borne Diseases and Knowledge Graph Construction*

7

Molly McVicar (UNR), *The Genetic Landscape of Ixodes pacificus and the Pathogen Prevalence of Ticks in the American West*

8

Justin Riggs (U of I), *Herd Shep: A STEM video game using agent based models of evolution*
Collaborators: Terry Soule, Barrie Robison, Landon Wright, Ava Rummler

9

Carson Rueber (U of I), *Outbreak Simulator : An Interactive Simulation of Disease Using Compartment Models*
Collaborators: Carson Rueber, Landon Wright, Barrie Robison

10

Joseph Savage (Dartmouth), *Modeling the Spread of Lyme Disease in Response to Climate and Land Cover in the Northeastern United States*
Collaborators: Jonathan M. Winter, Lucas E. Price

11

Jiyin Zhang (U of I), *LLM-Assist Data Analysis Case Study in Earth and Environmental Data Science*