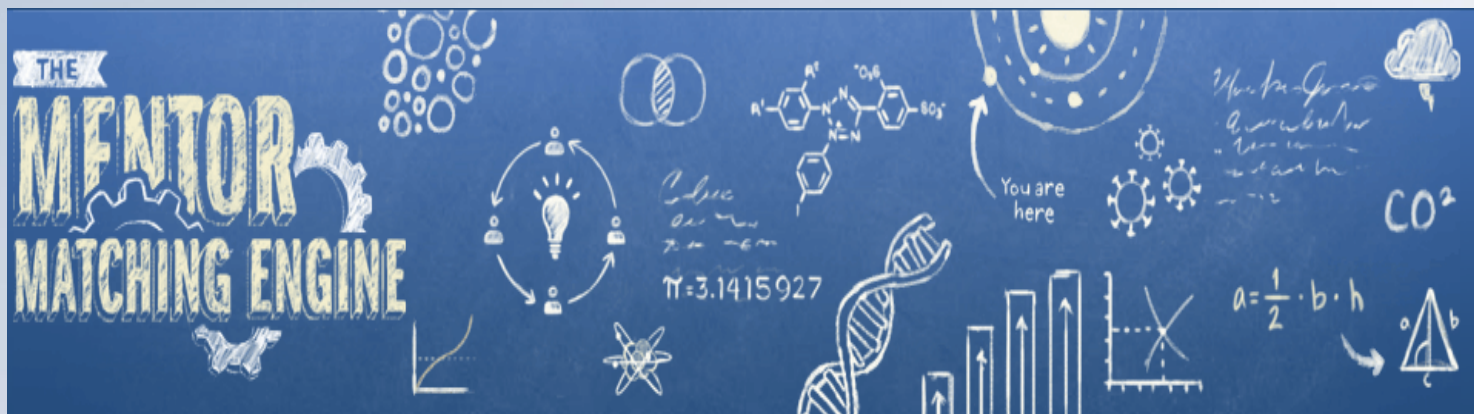




Mentor Matching Engine



Presented by Jacki Naughton and Carl Heine, 2/27/15

What is the MME?

The Mentor Matching Engine is an invitation-based platform to bring together Mentors, Students and Teachers for personalized inquiry-based learning in science, technology, engineering and mathematics (STEM) fields. By connecting mentors and students electronically, we are able to offer high-quality mentoring experiences for students and mentors alike in a safe and secure environment while eliminating geographic barriers.

The electronic platform offers learners access to mentors from industry, universities and colleges and federal laboratories to collaborate on high-quality research and development projects.

Features

Teachers can:

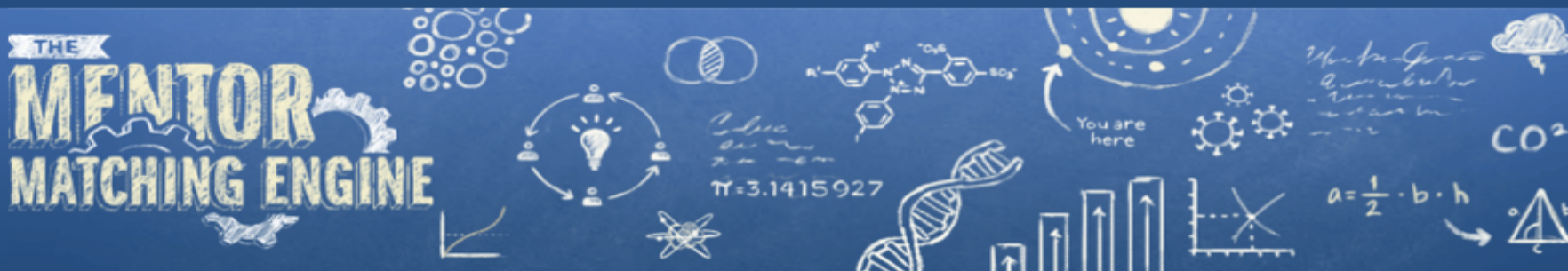
- Invite students
- Invite mentors
- Review and approve the student research question(s)
- Monitor communication between the student and mentor
- Manage all projects on a single page
- Assist students with mentor selection, and approve the mentor match

Students can:

- Create a project
- Develop a research question
- Provide an optional Letter of Introduction
- Find a mentor
- Communicate with the teacher and mentor within the MME



Jacki Naughton | Teacher

[Return to Dashboard](#)

How We Work

The Mentor Matching Engine is an invitation-based platform to bring together Mentors, Students and Teachers for personalized independent student research projects in science, technology, engineering and mathematics (STEM) fields.




Community Building

By connecting mentors and students electronically, we are able to offer high quality mentoring experiences for students and mentors alike in a safe and secure environment while eliminating geographic barriers.

[Learn More](#) 

Mentor Matching

Each participant will design his or her own guiding research question and will be able to find mentors on this platform to guide them in conducting their research.

[Learn More](#) 

Collaborating

We offer students access to mentors from industry, universities and colleges and federal laboratories to collaborate on high-quality research and development project and mentors the opportunity to work with Illinois's brightest future scientists.



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Solutions

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Year One

15 schools invited by ISTC

~ 118 students invited, 59 approved

~ 200 mentors invited, 70 approved

Year Two

~ 99 teachers representing 32 schools

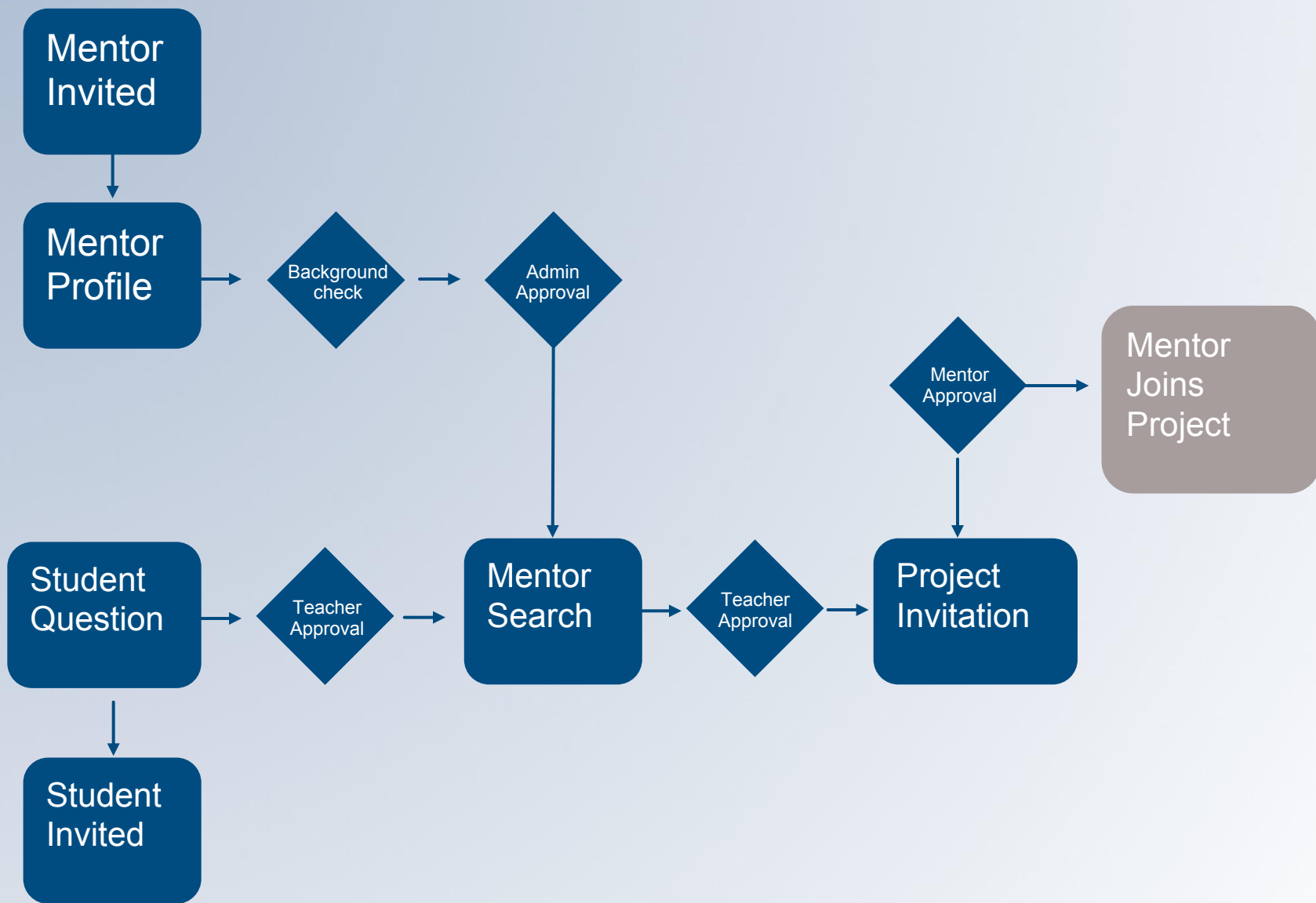
~ 711 students invited, 441 approved

~ 316 mentors invited, 242 approved

- Argonne National Lab
- Baxter Healthcare
- Bristol Community College
- Fermilab
- IBio
- IIT
- IMSA
- Institute for Science Education and Technology
- ISU

- Los Alamos National Laboratory
- Loyola University
- MIT
- NIU
- New York University
- Northwestern University
- Shedd Aquarium
- SIU Carbondale
- Worcester Polytechnic Institute







Projects

Invitation Status

Edit Profile

How To

Orientation Materials +

Projects

Search Mentors

Student Name	Project Name	Status	Action
Kruti Sutaria	The Effect of Acid on Cell Membrane	Ongoing	
Roshana Krishnappa	DNA Damage Caused by UV Radiation	Ongoing	
Keshav Kapoor	Biodiesel from coffee and tea	Ongoing	
Theresa Do	Artificial Intelligence to Increase Productivity and Effectiveness of Insulin Pumps for Diabetics	Ongoing	
Simon Su	The Effects of Algae on the Remediation of Oil Spills in Aquatic Environments	Ongoing	
Paulina Kulyavtsev	Effectivity of Acne Medication	Ongoing	
Vandana Ravi	How does Sodium Benzoate effect the Catalyst Enzymes in the Liver?	Ongoing	
Arthur Migdal	Computerized Solution and Generation Puzzles	Awaiting Mentor Request	



Jacki Naughton
Teacher

☰ Projects

📊 Invitation Status

✎ Edit Profile

💬 How To

📄 Orientation Materials +

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The Effect of Acid on Cell Membrane (Ongoing)

Project Name (Required)

The Effect of Acid on Cell Membrane

Guiding Question (Required)

Does exposing cells to various levels of acidity affect the number of vacuoles formed?

Letter of Introduction

Project Categories

- Biology (1)
- Chemistry (1)
- Engineering (0)
- Mathematics
- Physics
- Behavioral and Social Sciences (0)
- Computer Science
- Consumer Science
- Earth Science (0)
- Nanotechnology
- Material Science

Teacher



[Jacki Naughton](#)

Student



[Kruti Sutaria](#)

Mentor



[Jeffrey Liu](#)

 [Subscribe to The Effect of Acid on Cell Membrane's activities.](#) (Opens New Window)

Blog

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Calculating mM concentrations of salicylic acid

1/8/14 6:22 PM

Hi Kruti If you are starting from a solid form of the salicylic acid, start at the second paragraph. If you are started from a liquid form with a known molarity, you can skip to the fourth paragraph. Molarity is a unit of concentration that reflects the amount of solute (chemical being dissolved) in moles per amount of solvent in Liters. mM or millimolar is simply 10^{-3} M

[Read More »](#)

By Jeffrey Liu | [0 Comments](#)

The Effect of Acid on Cell Membrane

12/27/13 12:12 AM

Does exposing cells to various levels of acidity affect the number of vacuoles formed?

[Read More »](#)

By Kruti Sutaria | [7 Comments](#)

[RSS \(Opens New Window\)](#) [Subscribe](#)

Showing 2 results.

▼ Comments

Trackback URL: <https://coolhub.imsa.edu/group/the-effect-of-acid-c>

[Add Comment](#)



[Jacki Naughton](#)

Kruti,

I suggest you ask your mentor about how to make the mM concentrations of salicylic acid.

Posted on 1/5/14 3:36 PM.



[Kruti Sutaria](#)

Hello Mr. Liu,

I am going to expose the cell membranes to acid, which will be measured in terms of mM. How would I make the mM concentrations of salicylic acid?

Posted on 1/8/14 4:34 PM.



[Kruti Sutaria](#)

Hello Mr. Bubley,

In order to conduct my experiment, I need to grow yeast and Tetrahymena cells. I have a "Tetrahymena medium" to grow the Tetrahymena, but how exactly would I grow both types of cells?

Posted on 1/14/14 5:27 PM.



[Jeff Bubley](#)

Hi Kruti!

My name is Jeff Bubley and I am a first year medical student at the Technion Israel Institute of Technology. I have previously done research on the effects of melatonin on phagocytosis in Tetrahymena. I am currently beginning research regarding the effect of certain toxins on the retina. If you have any questions about your project, please feel free to contact me!

I'm a bit confused as to what you are doing with the yeast cells. For my project, I mixed 1 part 2% india ink and 1 part Tetrahymena solution (a 1% india ink/tetrahymena solution). After various time points (0 min, 5 min, 10 min, 15 min, 20 min) I took a drop from the solution and fixed it on a slide. To do this I used "protoslo." For me the yeast cells were not necessary. Is there a particular reason that you are using them?

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<http://www.istcoalition.org/r-d-stem-learning-exchange>

❑ Apply to be an R&D STEM Learning Exchange School
https://docs.google.com/forms/d/1S3sd9UFdN9WIM02IlyRO0z_VOY2rhsB7fYNcmOy2veM/viewform

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- What is Research and Development?
- Partners
- Nanotechnology
- ISEIF
- Get Involved

R&D STEM Learning Exchange

Who We Are

The Research & Development STEM Learning Exchange (RDLE) is a coalition of 50+ cross-sector partner organizations dedicated to educating, recruiting and retaining the next generation of STEM talent for Illinois industry research and development (R&D). We are part of Illinois Pathways, a state-led and federally supported STEM education initiative designed to support college and career readiness for all students.

Become a partner school of the R&D STEM Learning Exchange.

APPLY HERE

Year-End Report

R&D STEM Learning Exchange

For more information contact Emily Cooper at ecooper@istcoalition.org



Q&A

You have

Questions

We have

Answers