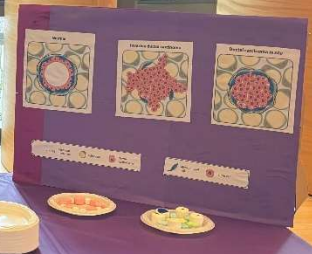






Cells in our
BODY
HOW THEY TAKE DIFFERENT FORMS!
By: Mittal Lab











MICROBIOLOGY
 ALUMNI
 MICROBIOLOGY IS THE STUDY OF MICROORGANISMS
 THESE INCLUDE BACTERIA, FUNGI, VIRUSES, AND PROTISTS.
 WE STUDY HOW THEY GROW, REPRODUCE, AND INTERACT
 WITH EACH OTHER AND THEIR ENVIRONMENT.



MOTILITY DEEP
 BACTERIA CAN MOVE THROUGH LIQUIDS AND SOLIDS.
 THIS IS CALLED MOTILITY. IT IS IMPORTANT FOR
 BACTERIA TO MOVE TO FIND FOOD AND AVOID
 HARMFUL SUBSTANCES.



WHAT WE DO AS MICROBIOLOGISTS
 AS MICROBIOLOGISTS, WE STUDY THE
 PROPERTIES AND BEHAVIOR OF
 MICROORGANISMS. WE USE
 VARIOUS TECHNIQUES TO
 IDENTIFY AND CULTIVATE
 THESE ORGANISMS.



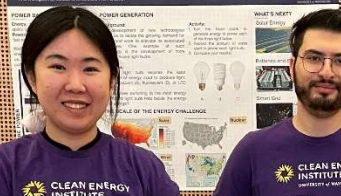
AGAR PLATE
 AGAR IS A GELATINOUS SUBSTANCE
 USED TO CULTIVATE BACTERIA.
 IT IS MADE FROM SEAWEED
 AND IS A SOURCE OF CARBON
 AND ENERGY FOR BACTERIA.








Exploring the Scale of the Energy Challenge



Pedal Your Way to
POWER
The magic of a pedal power generator!

TEST
YOUR
ENERGY
KNOWLEDGE!















Capillary Action:
THE BLACK WIDOW
OF THE AVENGERS
By: Clarissa Lab









Exploring the Scale of the Energy Challenge
BY: [Name]
[Content]

CLEAN ENERGY INSTITUTE
UNIVERSITY OF MISSISSAUGA

Pedal Your Way to POWER
The magic of a pedal power generator!
by Clean Energy Institute

TEST YOUR ENERGY KNOWLEDGE!







MICROWAVE
MAGIC
By: STEM PALS

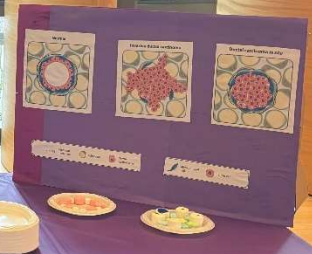
Microwaves!

STEM PALS





Cells in our
BODY
HOW THEY TAKE DIFFERENT FORMS!
By: Mittal Lab







THE POWER OF
SOUND
Transmitting energy through AIR
so MATERIALS re made BRAIN DELIVER
by Nance Lab

How do energy waves move?

Gas	Liquid	Solid









MILK
FIREWORKS
By: Inclusion in Chemical Sciences

Inclusion in Chemical Sciences
MILK FIREWORKS



POLYMERS ARE
SNOW COOL
By American Institute
of Chemical Engineers



POLYMERS ARE
SNOW COOL
By American Institute
of Chemical Engineers



FLYING Butterflies
The science of
STATIC ELECTRICITY
By: ACES

FLYING BUTTERFLIES: THE SCIENCE OF STATIC ELECTRICITY
1. DECORATE THE BUTTERFLY!
2. CHARGE YOUR BALLOON
3. READY TO FLY?























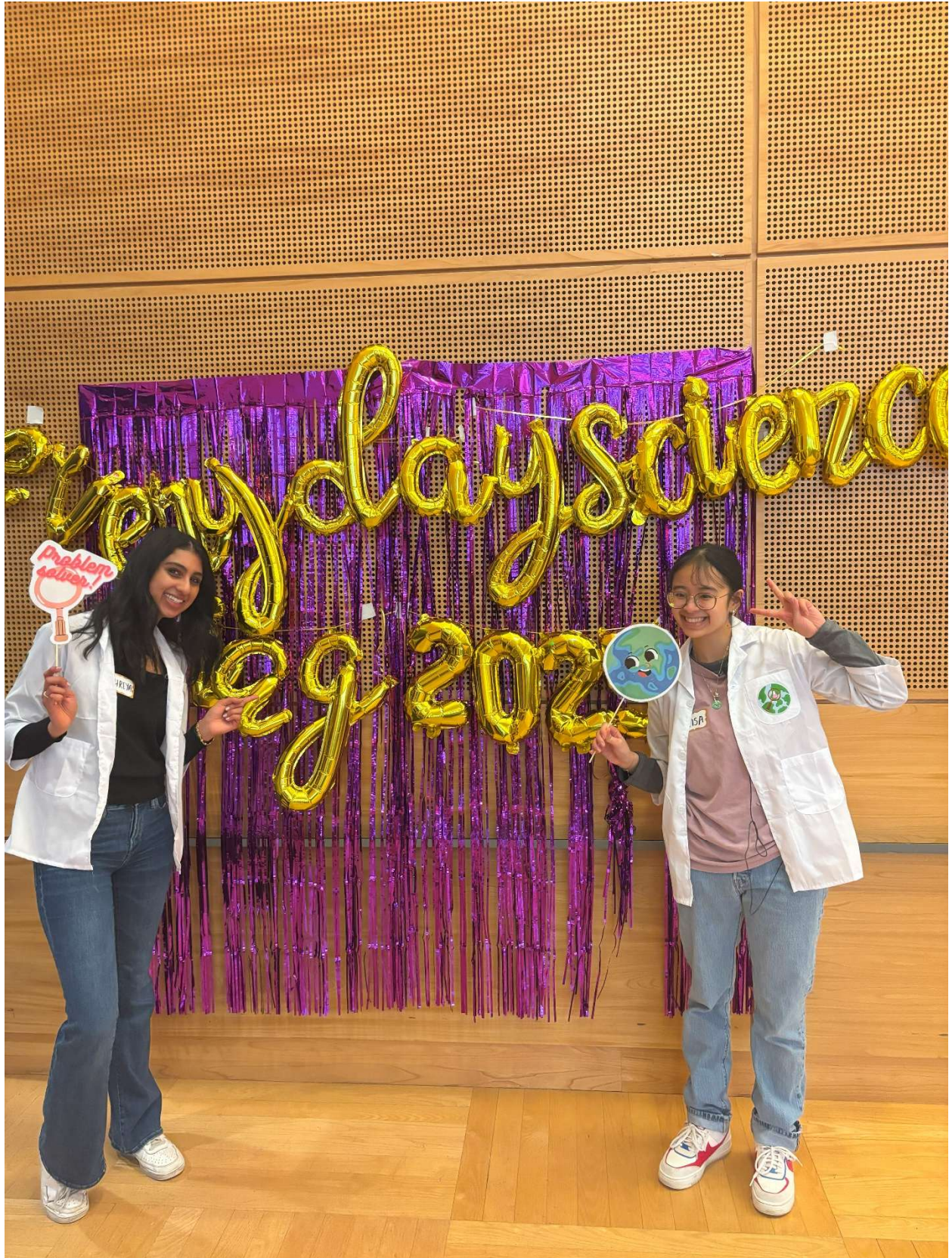


























MICROBIOLOGY
ALUMNI
MICROBIOLOGY IS THE STUDY OF MICROORGANISMS
THAT ARE TOO SMALL TO SEE WITH THE NAKED EYE.
THEY INCLUDE BACTERIA, FUNGI, VIRUSES, AND
PARASITES. MICROBIOLOGISTS STUDY HOW THESE
ORGANISMS INTERACT WITH EACH OTHER AND
WITH HUMANS, ANIMALS, PLANTS, AND THE
ENVIRONMENT.

MOTILITY DEEP
BACTERIA CAN MOVE IN MANY DIFFERENT WAYS.
SOME USE FLAGELLA TO SWIM THROUGH LIQUIDS.
OTHERS CRAWL ALONG SURFACES USING PILI.
SOME EVEN CLIMB UP GLASS SLIDES USING
THEIR TAILS. MOTILITY DEEP IS A CHALLENGING
PROJECT THAT EXPLORES THE DIFFERENT WAYS
BACTERIA MOVE.

WHAT WE DO ASM
ASAP (AMERICAN SOCIETY FOR MICROBIOLOGY)
IS A LEADING ORGANIZATION FOR MICROBIOLOGISTS.
WE DO MANY THINGS TO PROMOTE THE STUDY
OF MICROBIOLOGY AND TO SUPPORT MICROBIOLOGISTS
EVERYWHERE. WE OFFER GRANTS, FELLOWSHIPS,
AND EDUCATIONAL OPPORTUNITIES. WE ALSO
CONDUCT RESEARCH AND SHARE OUR FINDINGS
WITH THE SCIENTIFIC COMMUNITY.

AGAR PLATE
AGAR IS A GELATINOUS SUBSTANCE THAT IS USED
TO CULTIVATE BACTERIA IN THE LABORATORY.
IT IS MADE FROM SEAWEED AND IS A SOURCE OF
CARBON AND ENERGY FOR MANY BACTERIA.
AGAR PLATES ARE USED TO GROW BACTERIA
AND TO OBSERVE THEIR GROWTH PATTERNS.
DIFFERENT BACTERIA CAN GROW AT DIFFERENT
TEMPERATURES AND IN DIFFERENT MEDIA.
AGAR PLATES ALLOW US TO STUDY THESE
DIFFERENCES AND TO IDENTIFY BACTERIA.



















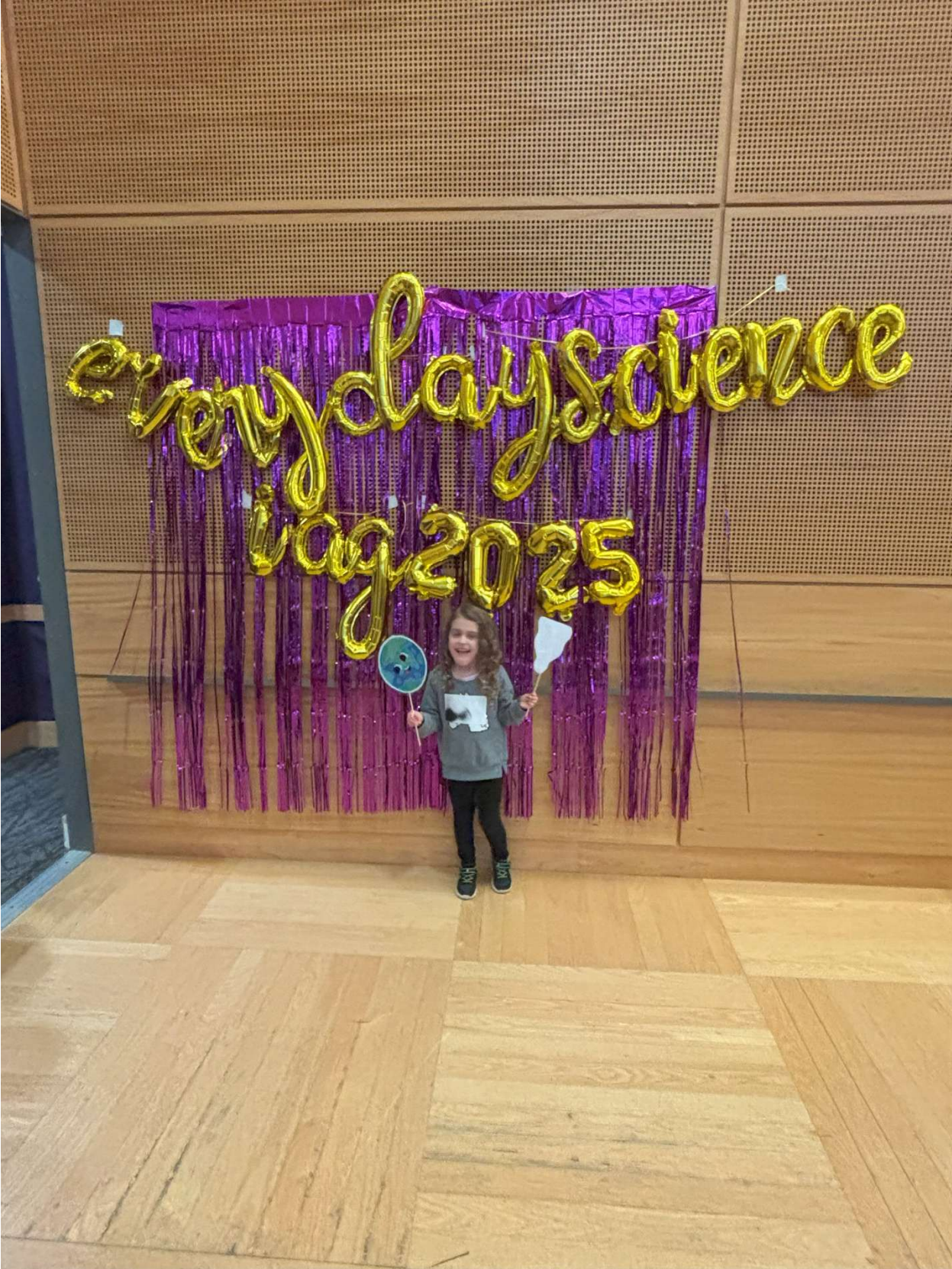


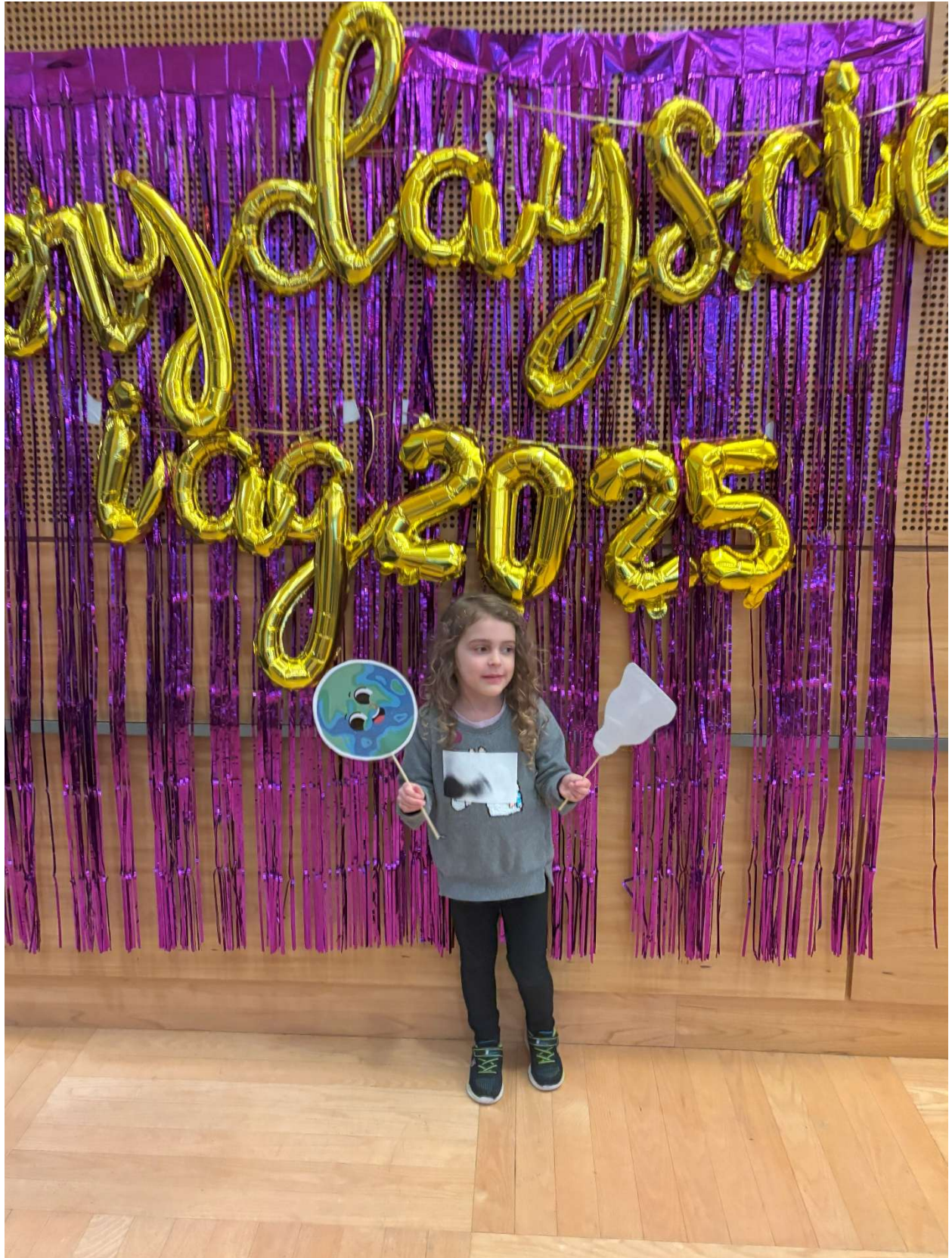


















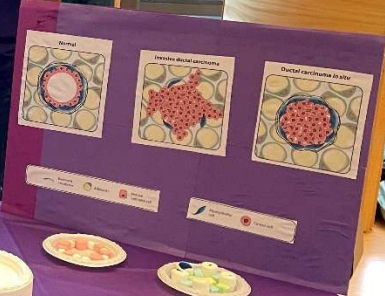








Cells in our
BODY
HOW THEY TAKE DIFFERENT FORMS!





























How do energy waves move?

Gas	Liquid	Solid
Diagram of gas particles moving in all directions.	Diagram of liquid particles moving in a disordered, packed state.	Diagram of solid particles in a regular, crystalline lattice structure.

WELCOME TO THE TABLE





FLYING Butterflies
The science of
STATIC ELECTRICITY

FLYING
BUTTERFLIES
THE SCIENCE
OF STATIC
ELECTRICITY

1 DECORATE
THE
2 CHARGE
YOUR
3 READY TO

FLYING Butterflies
The science of
STATIC ELECTRICITY



CAPABLE
CARBON FILTERS
By: Climate Collab

KARHEND
PREMIUM
ACTIVATED
CARBON





Capillary Action :

THE BLACK WIDOW OF THE AVENGERS



By: Clanwaju Lab

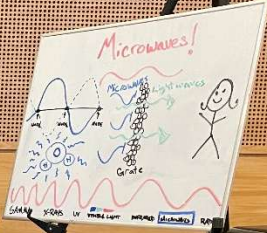








MICROWAVE
MAGIC
By: STEM PALS















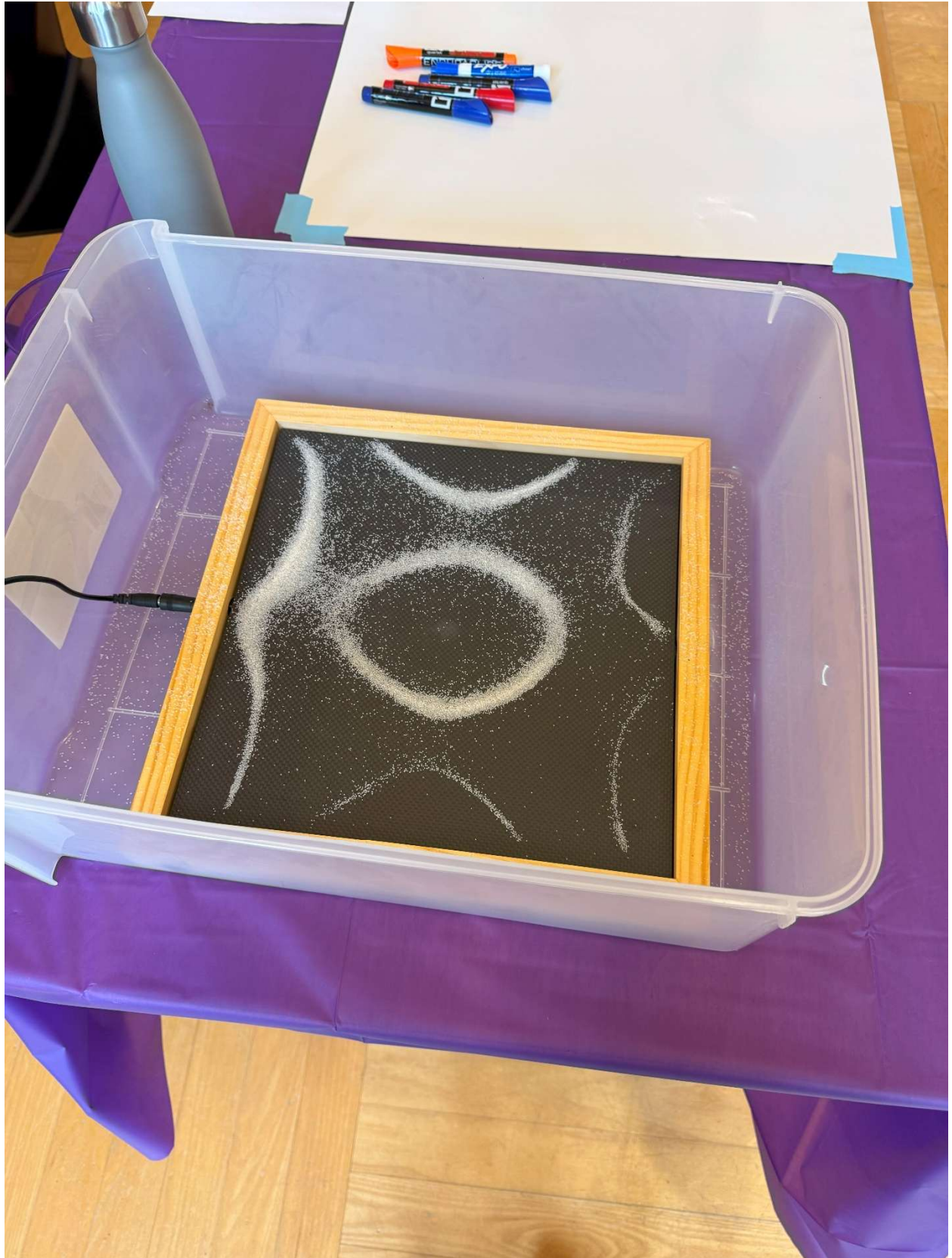
Building
Molecule Model
By: IMOD

Carbon Dioxide
CO₂









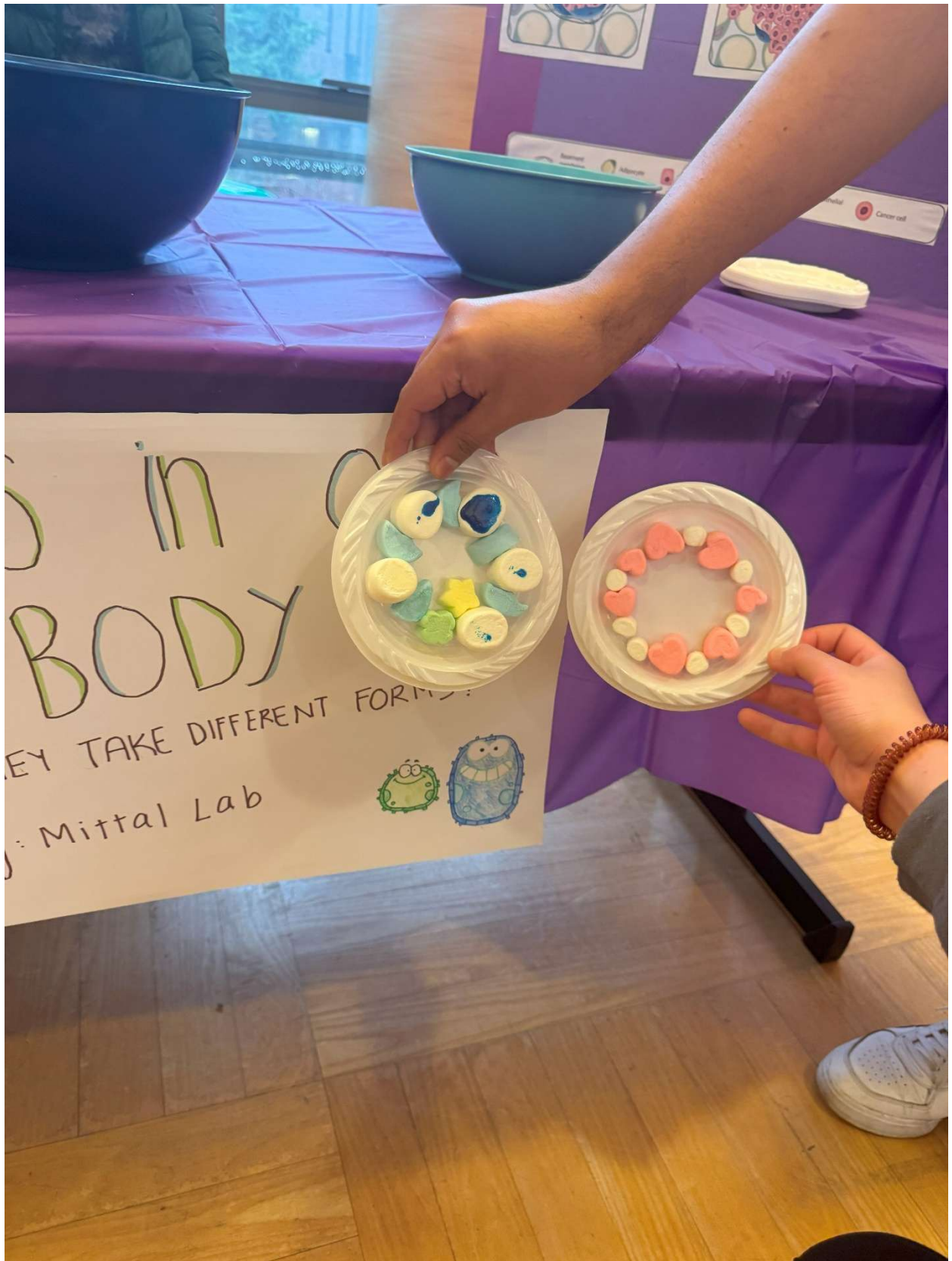












Cells in
BODY
THEY TAKE DIFFERENT FORMS
Mittal Lab



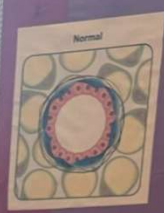
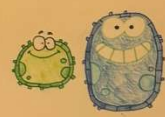
Cancer cell



Cells in our BODY

HOW THEY TAKE DIFFERENT FORMS!

By: Mittal Lab



Epithelial cell Cancer cell



DIY WATER FILTER
Make Clean Water
with Everyday Items
By: Bergsman Lab

Kurt L. Lesker
Fest Tapes
Homemade



DIY WATER FILTER
Make Clean Water
with Everyday Items
By: Bergeman Lab



DIY WATER FILTER
Make Clean Water
with Everyday Items
By: Bergaman Lab



DIY WATER FILTER
Make Clean Water
with Everyday Items
By: Bergaman Lab





Brewing Up Biopolymers:
THE JOURNEY FROM
TEA TO ADVANCED
MATERIALS
By: Roumell Research Group



Brewing Up Biopolymers:
THE JOURNEY FROM
TEA TO ADVANCED
MATERIALS
By: Raumell Research Group



Brewing Up Biopolymers:
THE JOURNEY FROM
TEA TO ADVANCED
MATERIALS
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Capillary Action:
THE BLACK WIDOW
OF THE AVENGERS
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