

The Adventures of Meg A. Mole, Future Chemist

Dr. Erica Hartmann, Postdoctoral Fellow

This year I had the honor of visiting the University of Oregon! This is where I met Dr. Erica Hartmann, a Postdoctoral Fellow at the university's Biology and the Built Environment Center. Dr. Hartmann collects dust and studies it to find out what types of chemicals and microbes are in it. Microbes, she explained, are single-celled life forms that are so small, millions could fit on the head of a pin!

When I arrived, Dr. Hartmann took me on a "dust collection" field trip! She showed me how she collects her samples. She crawled across floors, climbed over furniture, and even crawled across rafters in the ceiling! Her newest dust collector is a cool backpack vacuum cleaner that she carries on her back, just like in the movie, *Ghostbusters*! Her job allows her to get dirty, and she told me she really enjoys not having to wear a suit every day. She does have her favorite lab accessory that she wears every day – purple nitrile gloves!

I asked Dr. Hartmann if she enjoyed the sciences when she was growing up. She exclaimed, "Yes! I always really liked biology. It wasn't until much later, when I had an amazing chemistry professor in college, that I started to be interested in chemistry." Her parents and teachers inspired her to be a scientist. "My father worked at



NASA, and they used to have an event called Take Your Daughter to Work Day (now I think it's open to all children of NASA employees, both girls and boys). My father took me every year, and I did all kinds of activities. I especially remember

eating astronaut ice cream. Also, in 7th grade, my science teacher was a beekeeper at a local nature center, and I volunteered to help with the hives." She told me she really made her decision to be a scientist in college, where she had some "truly excellent mentors."

Dr. Hartmann told me her favorite part of her job is changing the world! "In science," she said, "we can make important discoveries that keep people healthy and make the world a better place." She also likes that she has been able to explore the world. "I've traveled for work all across the US, and also to Italy, Japan, France, Germany, and most recently, Finland."

So, where would we all come in contact with her work? She explained, "Everywhere! There are chemicals and microbes all around you, and even inside of you. My job is just trying to figure out what these microbes are, and what they're doing."

Word Search

Try to find the words listed below – they can be horizontal, vertical or diagonal, and read forward or backward!

C	Y	C	L	O	D	E	X	T	R	I	N	S
T	V	O	A	F	U	N	G	I	E	E	C	V
D	E	N	A	D	T	C	P	R	T	T	C	X
I	N	X	P	D	N	R	M	F	A	A	T	Z
F	T	E	M	I	I	R	E	A	W	P	S	J
F	I	E	U	U	N	C	B	T	D	I	Y	Q
U	L	I	C	O	P	I	O	T	R	S	B	E
S	A	U	S	O	S	I	R	Y	A	S	O	E
I	T	E	R	T	U	E	C	A	H	I	T	E
O	I	M	R	E	S	U	I	C	B	D	S	E
N	O	O	O	T	L	F	M	I	T	T	W	A
D	N	I	I	L	L	O	H	D	E	F	U	A
E	U	A	R	C	D	D	F	G	R	H	K	A

CYCLODEXTRINS
DIFFUSION
DISSIPATE
FATTY ACID
FUNGI
HARD WATER
MICROBE
MOLD
SCUM
VENTILATION

For answers to the Word Search, please visit the Educational Resources page at www.acs.org/earthday.



Personal Profile

FAVORITE PASTIME/HOBBY? Fencing and skiing

ACCOMPLISHMENT YOU ARE PROUD OF?

When I got my driver's license (at 16), my parents wouldn't buy me a car, so I got an after-school job and worked really hard to save up enough money to buy one for myself. I loved that car and drove it for 7 years!