

## Events

- > Saturday 1/31  
Downhill Ski Trip  
Holiday Valley
- > Sunday 2/1  
Superbowl!!!!
- > Sunday 2/8  
First year/Second year  
Snow-bowl football game
- > Thursday 2/19  
GMA Charity Auction  
Volunteers Needed!!

# The UB MBA Exchange

“ because knowledge is power. ”

## Networking—the Key to a Career

ROBIN PENBERTHY

You have spent years earning degrees to develop “what you know”. But, it doesn’t matter how much you know if you can’t get an opportunity to showcase it. Landing a job can be difficult, even more so in these economic times. That’s where “who you know” can provide a competitive advantage.

The UB School of Management Alumni Association (SOMAA) can help. What is an alumni association? Some people think of it as a fund-raising arm, i.e. it’s the University’s way of “getting money” from them. This is far from the truth. The UB SOMAA is all about **networking** and **connecting**. Students and alumni have different reasons why they network. As a student, it’s about getting a job. As time goes on, it’s about connecting with

people in your field to be more successful in your career. At some point, it is connecting back with the University, where it all started.

The SOMAA provides students networking opportunities to enhance marketability. In January, first year MBA students had a chance to practice their networking skills with our Board of Directors, which is comprised of over 30 business leaders. In February and March, students have the opportunity to interact with business professionals at a roundtable session entitled “Conversations with Executives”. Also in March, the SOMAA will co-sponsor the “Sneak Preview” weekend for incoming MBA students and at the Spring Soiree, a Leadership Award will be presented on behalf of the SOMAA. Our organization subsidizes business cards for

MBA students, proudly sponsors the Network New York and Network Buffalo events, and is open to your ideas to grow and provide additional resources to our UB School of Management students.

For students and alumni, we offer networking/social events, including a Wine Tasting/Dinner in May, a “Salute to Summer” cruise on the Miss Buffalo boat in September, and an Annual Awards banquet in November. Connecting with someone at these events may just lead to an opportunity. So, remember, it’s just as important to expand the “who” you know as it is the “what” you know. Visit the SOMAA Web site at [mgt.buffalo.edu/alumni](http://mgt.buffalo.edu/alumni) for more information or stop by our office at 150 Jacobs.

### Inside this issue:

<b>The Raleigh Story</b>	<b>2</b>
<b>Ask Dave</b>	<b>3</b>
<b>Notes from the Editor</b>	<b>3</b>

## The Raleigh Story: Cosmic Waves and Ramen Noodles

RALEIGH LOVE

The man behind the story.



This week let us reheat some leftovers in memory of one of the original Raytheon engineers who recently passed away. Thanks to his efforts and the research of his peers, we can now burn our mouths on a cup of hot chocolate in under a minute. I am, of course, talking about one of the most, if not the most, prolific kitchen appliances of our era, the microwave oven. But what exactly happens between the time you push the start button and the time the buzzer sounds? To quote the fabled science fiction writer, Arthur C. Clarke, "Any sufficiently advanced technology is indistinguishable from magic."

But seriously, to understand the processes that go on inside that box, we must start with the name itself. Microwaves are generally labeled as the range of energy frequencies between 0.3 Ghz and 300 Ghz. That range is sandwiched in-between the Infrared spectrum and the top of the FM radio band. The infrared spectrum, that is, heat, has been used for cooking food for as long as people have eaten cooked food. Likewise, since their discovery, radio waves can be used for cooking as well with a sufficiently strong signal. This is the reason radio transmitters are placed high in the air, it's not only about reception. You place a thanksgiving turkey on top of a radio tower and key the mic, it'll cook in seconds.

But Microwave ovens work a bit differently, which is why microwaves can't perform certain culinary effects, such as browning. Rather than bombarding the atoms of a piece of food with energy like the process of broiling, the microwave creates an electric field within the oven at a microwave frequency using a device called a magnetron. A mesh screen known as a "Faraday Cage" channels the electromagnetic radiation to prevent things outside the oven from getting cooked. Any metal objects placed within the faraday cage (like a fork) conduct the radiation like an antenna. This not only heats the metal object, but can create electric arcs within the microwave. Some foods (like grapes) can produce similar effects.

By the way, did I mention stuff like that is dangerous and you shouldn't do it?

Anyway, the physical structure of certain molecules like water, as well as some fats and sugars inherently has a micro-voltage across its length called a dielectric moment. When the microwave creates the electric field, these molecules rotate to align themselves with the field, much in the same way iron filings do in proximity to a magnet.

That's all fine and dandy, but then the microwave reverses the electric field. This forces the dielectric molecules to rotate again to face the other

direction. The continuation of the field reversal results in sustained atomic agitation, thus heating the food. The process works best on substances with molecules free to move, i.e. a microwave will boil water more efficiently than it will melt ice. However, this type of heating can have some surprising results.

Without getting too deep into the particularities, this kind of energy transfer is different from standard heating by exposure to an infrared heating element. The microwave's ability to superheat water illustrates this difference. The phenomena is more likely to occur with distilled water than other types, as impurities like salts within the water affect the water's chemical properties, making it more susceptible to boil.

However, sometimes, a microwave can heat water beyond boiling point without actually causing the water to boil. In this superheated state, it only takes a small disruption to cause the entire vessel of water to flash-boil instantly. If you're holding onto the glass or whatever contains the water, you could easily get scalded.

That's it for this week. So until next time, here's to keeping yourself (and your imagination) well fed.

### Hat of the Week



### Ushanka

Northern Eurasian Origin

Name is Russian for "ear flaps hat"

Became Russian icon after WWII

## Ask Dave

**Dave had no questions to answer this week, and since he is very busy, we thought we would leave you with this.  
Send "Ask Dave" questions to [mbaxchange@gmail.com](mailto:mbaxchange@gmail.com)**



### Updates from the Editor-in-Chief

We're looking for a few ambitious first year students to take over for Evan and I starting next fall. Do you want to be the next Editor or Director-in-Chief? If so, we want to hear from you!

Are you interested in contributing to the MBA Exchange? We are always looking for people interested in sharing articles, updates on SOM activities, pictures of MBA events, etc. Do you have something to share with your classmates?

**Send us an email — [mbaXchange@gmail.com](mailto:mbaXchange@gmail.com)**

#### **THE UB MBA EXCHANGE**

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