Talkin’ ‘Skahnsin
Linguists listen to how we talk ‘round here.

For newcomers to Wisconsin, a humdrum visit to the store can turn into a startling cultural experience when the cashier politely asks, “Do you wanna beg for that?”

It’s one of the more comical manifestations of the unmistakable Wisconsin accent. Just as they pronounce bag more like beg, native Wisconsinites pronounce many words just a little differently. Milk can sound like melk, for example, while cot often comes across as cat.

These curious bits of the ‘Skahnsin accent speak volumes to linguists such as Joseph Salmons and Thomas Purnell. The UW-Madison professors have launched the Wisconsin Englishes Project to study why Wisconsinites talk the way they do — and how those regional speech patterns may change over time.

Contrary to popular belief, regional accents have not diminished in the age of mass media. In fact, they’re shifting and becoming more distinctive all the time, making them a living model for linguists who hope to understand what influences people’s speech patterns. Wisconsin is a particularly intriguing place to ask that question, because it sits at the intersection of two radically different regional trends.

To the west, people tend to pronounce caught like cot, a pattern linguists refer to as the “Low-Back Merger.” Meanwhile, parts of southern Wisconsin are being influenced by a speech pattern, known as the “Northern Cities Shift,” which tends to make cot sound more like cat.

“Wisconsin is probably the only place [in the United States] where two huge, highly conflicting linguistic patterns are colliding,” says Purnell.

The researchers will study this lingual battle by collecting audio recordings of native Wisconsinites and analyzing them with acoustic equipment that breaks speech apart into sound waves, allowing them to identify exactly why someone from Chicago sounds different from someone from Rice Lake.

Salmons and Purnell say their work can have important implications for how English is taught in schools and may lead to new questions, such as how ethnicity and immigration will affect dialect over time.

“As opposed to other dialects in America, Wisconsin English has been grossly understudied,” Salmons says. “This is just the tip of the iceberg.”

— Paroma Basu

Physicist Pamela Klabbers shows off the processing card that drives the world’s fastest camera.

COOL TOOL
Picture This…and This…and This...

Think that hot spiffy digital camera you just bought is fast? UW-Madison researchers have developed a $6 million camera that puts it to shame. It’s designed to capture particle collisions — about 40 million of them every second — making it the world’s fastest image processor.

Who needs all those snapshots of protons banging into each other? Well, particle physicists do. They’ve long searched for the elusive and short-lived bits of matter that are released when larger particles crash — particles that they’ve only theorized exist, but never seen. The UW’s “camera” will be hooked up to a giant accelerator in Switzerland that will create collisions between particles traveling near the speed of light. Not only will the camera process an image about every twenty-five billionths of a second, but it will self-edit those images, sending data about only the most interesting collisions. Now that’s a feature we’d like to see on some of our friends’ cameras.

— Michael Penn

Scientists may have a little more time to help ward off a potential outbreak of avian flu among humans, according to the findings of a UW-Madison flu researcher. Virologist Yoshihiro Kawaoka studied human tissue samples and learned that although the virus responsible for avian flu can replicate in humans, only cells deep within the respiratory system have receptors that allow the virus to enter. The research helps explain why the virus rarely infects humans, and it also suggests that existing strains of bird flu must undergo genetic changes before they are capable of posing a serious threat of a pandemic. “No one knows whether the virus will evolve into a pandemic strain, but flu viruses constantly change,” Kawaoka says. “Certainly, multiple mutations need to be accumulated for the virus to become a pandemic strain.”

The largest individual gift in UW-Madison history — $50 million from alumni John ’55 and Tashia ’55 Morgridge — will pave the way for pioneering scientific collaboration at the Wisconsin Institutes for Discovery. The Morgridges’ donation will be matched by the Wisconsin Alumni Research Foundation to help build the facility, which will bring together scientists to attack the problems of disease and advance regenerative medicine.

A UW-Madison team has developed a unique ranking system that seeks to preserve Wisconsin’s lakes and rivers. The researchers divided the state into 1,600 hydrological units and identified the areas where conservation efforts are likely to be most effective. Those results will help guide restoration of watershed lands that keep pollutants from spilling into waterways.