STYLE

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Could a cloud of microbes be good?

Researchers studying how bacteria move through buildings have found evidence that we are all

Like the little boy in the Peanuts cartoon, a new study finds, humans travel about inside personal clouds of our own creation. But while Pigpen's was an obvious brown aura of dust from dirt, these real-world clouds are mostly invisible and full of microbes.

People exhale bacteria and other microbes and shake our microbe-laden skin and scalp cells into the air. Bacteria ride lint as it drifts off our clothing.

Like Pigpen, every move we make stirs up whatever live or dead bacteria, dust, lint, hair and other human debris happens to be lying around us.

What's more, researchers say, these invisible clouds can amount to a bioaerosol signature — traceable, under the right conditions, to

specific people. Writing in the Sept. 22 edition of the journal PeerJ, a research team from the University of Oregon at Eugene describes experiments involving just the right conditions: scantily clad people sitting quietly alone in a sanitized, climate-controlled chamber. Eleven such people were found to emit detectable microbial clouds into surrounding indoor air.

Using a genetic analysis that looked for 12 species of bacteria, the researchers found that test subjects also dropped around them different, personal assortments of

The researchers observed how quickly heavier bacteria and bacteria-laden particles settled onto petri dishes set on the surfaces around their sedentary test subjects. And they saw that other microbes remained suspended in the air until they fetched up against something they stuck to — air

"Bacterial clouds from the occupants were statistically distinct," the researchers write, "allowing the identification of some individual occupants."

The study, "Humans Differ in Their Personal Microbial Cloud." can be downloaded free online at

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WELLNESS

Comfort in clutter?



Arkansas Democrat-Gazette/JOHN SYKES JR

Melinda LaFevers sits by her laptop in the kitchen of her home in Searcy. In an effort to understand her hoarding, she blogs, posts on Facebook and has published a book, *Meditations of a Hoarder* (Just Cause, 2015).

Editor's note: This is the first of two articles on hoarding. For expert advice on clearing a house, see Saturday's Style section, Page 1E.

CHEREE FRANCO

ARKANSAS DEMOCRAT-GAZETTE SEARCY — The front yard hosts a few cars, a no-trespassing sign, a porcelain toilet lying on its side, a tangle of scrap wood, unidentifiable mechanical bits and several cats who broadcast their relation via halfbobbed tails.

Melinda LaFevers, 56, stalls near the closed door, making nervous small talk — the cats, the weather, the poisonous en counters her son has survived (his arm still bears rattlesnake fang marks), the plethora of brown recluse spiders inside.

Finally she gulps and says, "OK, you ready?" and opens the

To the left, the office is un-navigable, but a narrow path leads ahead, weaving through the living room's haphazardly stacked boxes and floor-to-ceiling books, past a TV, an empty water cooler and a old TV tray bearing cleaning supplies.

There is a makeshift sitting area - a tiny wooden Sunday School chair and a stool wedged among the piles on each side of the path, and LaFevers has lighted candles to cover the musk of mold. (Sometimes the living room and kitchen flood.)

The path winds on, around the island in the kitchen, where plants cling to a window, bot-

A hoarder knows she needs help — but when she is ready



Hoarders turned down Melinda LaFevers when she applied for the cable TV show because she did not have minor children at home and was not in a crisis.

tles crowd the tops of appliances and boxes of packaged food (some empty) cover every surface. Plastic shopping bags dangle from chairs, cabinets and handles, and piles of dishes jumble on the floor, on the counters and atop the washer

and dryer. The bathroom is usable ("Not a hoarder's bathroom," LaFevers proclaims, parroting a professional cleanup service that once assessed her home), with a clean sink and toilet. But the door doesn't move, lodged halfway open by piles of clothes, magazines and containers of half-used toiletries and blocked at the top by draped

A few weeks ago, a friend helped LaFevers replace the wiring in her water pump, restoring running water to her house for the first time in two years. While her pipes were dry, she showered at her fa-

ther's house LaFevers is unique in that she publicly acknowledges hoarding and details her sporadic efforts to declutter on Facebook and a blog (hoardinglife.wordpress.com). She has even written a book, Meditations of a Hoarder, available for \$8 from the Yard Dog Press imprint Just Cause.

"Hoarding is the emotional, mental problem that nobody talks about," she says. "Most people are so embarrassed, so

A 2008 Johns Hopkins University study suggests that 4 percent of the population could be hoarders (in the United States, nearly 13 million people), while a 2002 National Institutes of Health study found that women are twice as likely to hoard as men. A 1993 NIH study found that 78 percent of hoarders have an immediate family member who hoards, and a 2015 NIH study found that symptoms may appear as early as age 10, with a median onset between ages 20 and 30.

Sheila Jo Kornblum is a licensed clinical social worker in Rogers who specializes in hoarding disorder.

"Hoarding is a very complex disorder, in that it can come from a lot of different triggers," she says. "A lot of times it's triggered by something traumatic, a loss, someone has passed away. ... We used to think it was some sort of obsessive-compulsive disorder, but we're finding

it's really not." When the American Psychiatric Association's official reference, the Diagnostic and Statistical Manual of Mental

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Yeast has promise as medical conduit

ROXANNE KHAMSI THE NEW YORK TIMES

In August, researchers announced they had genetically engineered yeast to produce the powerful painkiller hydrocodone. And now, scientists have created yeasts that can make constituent chemicals associated with marijuana.

Yeast have been taught to create the main psychoactive compound in marijuana, tetrahydrocannabinol, or THC.

Synthetic versions of THC are available in pill form under brand names like Marinol and Cesamet; they are generally used to treat nausea, upset stomach and loss of appetite caused by HIV infection or chemotherapy.

The researchers say their genetically modified yeast could make THC in a cheaper and more streamlined way than traditional chemical synthesis. Using yeast also could shed light on the clinical usefulness of cannabis-derived compounds. Marijuana is being em-

braced as medicine, yet there is limited evidence that it is effective against many of the conditions for which it is prescribed. Researchers hoping to separate fact from wishful thinking will need much better access to marijuana's unique constituents. Modified yeast could provide

"This is something that could literally change the lives of millions of people," said Kevin Chen, the chief

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Research stirs disagreement about chronic kidney disease

PAULA SPAN THE NEW YORK TIMES Is it really possible that half of the population older than 70 has chronic kidney disease?

International guidelines adopted in 2012 make it seem that way. They define the disease in terms of how efficiently kidneys filter the waste from our blood, a measure called the glomerular filtration rate. Healthy young people commonly have GFRs of about 120. A GFR lower than 60 or another marker of kidney damage (such as protein in the urine) for more than three months means chronic kidney disease.

At which point, patients become scared.

"When you're told you have a disease, that's a bad day," said Dr. Ann O'Hare, a

nephrologist at the University

of Washington in Seattle who

adults. "Patients worry about dialysis, because that's what they associate with kidney disease."

specializes in treating older

Chronic kidney disease causes no symptoms until its later stages, and most senior citizens with the diagnosis are told they're at Stage 3 — of five stages. Because Medicare uses these benchmarks for billing and reimbursement, they've become, in effect, the official definition of the disease for older Americans. But wait a minute. Kidney

function declines with age in almost everyone, and the proportion of older people with GFR readings below 60 approaches 50 percent, studies have found. As the older adult

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Arkansas Democrat-Gazette/CELIA STOREY

Aimee Parkinson discovers that it's best not to overthink the Ballistic Dumbbell Row. Just lean forward, remember the patterns created by alternating toe touches, and pass the weight from pulling hand

Humans move in (thus should train in) 3 planes

MATT PARROTT

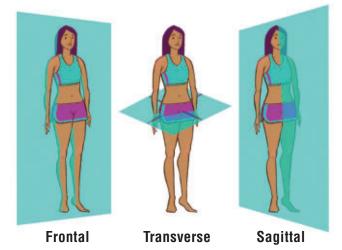
SPECIAL TO THE DEMOCRAT-GAZETTE Human movement takes

place in three anatomical planes, and yet a huge percentage of traditional strength-training movements occur only in one or two.

This week I'll discuss some of the kinesiology behind functional training and introduce a multi-planar exercise. That sounds like nerdy technical lingo, and it is, but as an exercise physiology nerd, I've studied more about human movement than most people care to.

Once in a while I'm even able to draw upon my years of study to make sense out of something useful that can be difficult to understand. Multi-planar movement is a perfect example.

"Multi" means more than one, and "planar" refers to planes — flat surfaces. The three planes of movement are the frontal plane, sagittal plane and transverse plane. Îmagine a plastic model of a man sliced through by three panes of glass:



Arkansas Democrat-Gazette/NIKKI DAWES

■ The frontal plane cuts straight down from the top of his head through both ears and shoulders to the soles of his feet, dividing him front from back.

■ A second vertical sheet goes through him perpendicular to the first one to separate his left side from his right side: This sagittal plane slides through his nose to his belly button and then between his legs and feet.

■ The transverse plane cuts him at the waist horizontally, separating his upper and lower body.

Now let's imagine exercises. A lateral raise, in which the arms move up and down at the sides of the body, occurs exclusively in the frontal plane. A biceps curl occurs in the sagittal plane. Only rotational exercises, such as torso twists, occur in the transverse plane.

Armed with this knowledge, it is incumbent upon the fitness professional to maximize the multi-planar nature of any client's exercise program. Why, you ask? Because life happens in all three planes.

Here's an example. The simple act of opening your car door requires shoulder flexion, shoulder extension, shoulder rotation, hip abduction, hip rotation, hip flexion, knee flexion and knee extension. While this may seem like an overly simplistic view, I believe it's important to train movement patterns that translate into measurable improvements in quality of life not just body fat reduction.

Functional training, by definition, uses movement patterns that relate specifically to an individual's daily activities. If someone works as a bank teller, we develop an exercise prescription that's largely conducted in the standing position. If another individual is a full-time parent, we might select exercises that require a good deal

of squatting under resistance. floor. Your left hand should be

The idea is to analyze the movements you make throughout the day and mimic them in the gym — to a degree. There's no need to train your ankle to press the gas pedal in your car. But working on a sitting posture is absolutely relevant for truck or taxi drivers. You get the idea.

This week's exercise is perfect for addressing patterns used during yard work (starting a mower, picking up leaves, etc.) because it requires pulling resistance toward your chest while leaning forward at the waist. The Ballistic Dumbbell Row is a functional exercise that's appropriate for all fitness levels.

1. Select one medium-weight dumbbell. Grasp the dumbbell in one hand and stand with your feet shoulder-width apart.

2. Lean forward from the hips so that your back is at a 45-degree angle with a flat lumbar spine. **3.** Hold the dumbbell with

your right hand and the right arm fully extended toward the

extended behind your left hip. **4.** Quickly row the dumbbell upward with the right

5. As you do this, quickly rotate your torso and move the left hand in front of your torso right beside the dumb-

6. Let go of the dumbbell with the right hand and catch it with your left.

7. Just as you grab the dumbbell, allow the left arm to fully extend while moving the right arm behind your

8. Continue alternating arms as you maintain good core stability for 12 repetitions. Performing this exercise at

a rapid pace will ensure that

the movement really does simulate activities you might perform daily. Matt Parrott has a doctorate in

education (sport studies) and a master's in kinesiology and is certified by the American College of Sports Medicine.

Hoarding

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Disorders, was updated in 2013, hoarding was added as a stand-alone disorder. But Kornblum says for many people, hoarding also includes components of attention deficit hyperactivity disorder, depression and anxiety.

"When you're depressed, it's harder to motivate yourself to take things to the curb. ... Anxiety makes it hard to make decisions about what to throw away, and the ADHD can cause you to get distracted and clean tiny bits in multiple areas, so that after a day's work, it may look like you've done nothing," she says.

"CLUTTERHOLIC"

LaFevers was a disorganized child, but she says her clutter became pathological in the early '90s, after the breakup of an unhappy marriage. She and her then-preteen sons moved into a roughly 2,000-square-foot house owned by her father and originally built as an art studio for her mother. The plan was for LaFevers to live rent-free while earning her master's in edu-

The house quickly grew cluttered. LaFevers' sons were relegated to a 10-by-10-foot slice of upstairs, prompting her father to build a couple of storage sheds. Rather than moving things out of the house, LaFevers accumulated more. Eighteen years later, she's still living in the studio.

"I didn't think of myself as a hoarder, but I did think I was a 'clutterholic,' a horrible housekeeper," she says. "At some points, I'd get better. I had a regular gaming group, and we would play over here occasionally. ... We'd play in the kitchen. Now they might have to travel a small path to get to the kitchen ..."

LaFevers trails off and tries to grin, but it comes off as a wince. She can talk about her hoarding, but it's a difficult and sometimes teary experience.

POSSESSIONS AS IDENTITY

"People with hoarding issues tend to have a strong connection to items," Kornblum says. "They may have a large collection of nice, hardbound books, and they feel that this indicates that they're an intelligent person, and if they got rid of those books, that would take away that part of them."

Other people worry that if they get rid of their possessions, they will lose the memories attached to those possessions, she says.



Melinda LaFevers blows dust from a ceramic bowl and pitcher set. One of the affirmations she tells herself is, "A memory that makes us happy is not dependent upon keeping an object.

According to Kornblum, identifying the underlying conditions — depression, anxiety or attention deficient disorder — and treating these with medication may be helpful, but the best treatment for hoarding is cognitive behavioral therapy. This type of intervention attempts to reprogram patterns of thinking and behavior.

We would challenge the cognitive distortions," Kornblum says. "Maybe take a picture of something and then throw the item away and ask, 'Did you actually get rid of that memory? Does the picture help you keep that memory?"

EMOTIONAL AND LITERAL WALLS

In 1994, LaFevers went through another romantic breakup. She comforted herself by collecting more stuff. "It's like, if somebody can

get through the clutter to really me, maybe they won't leave me, maybe they won't hurt ically painful." me," LaFevers says. Difficulties with close rela-

tionships — "intimacy issues" are common among hoarders. "If it's anxiety-provoking to have people over, clutter is a good excuse to not have to in-

vite them in," Kornblum says. LaFevers wants to have her things nearby — "It's mine,

and nobody can take it away" but at the same time, she resents her things.

"I can't have Christmas here. I can't have a dinner party here. When my son comes, we visit at my dad's," she says.

In 2009 LaFevers saw Hoarders: Family Secrets, the Lifetime "reality" show that brings a cleaning crew into hoarders' homes. She realized that her house was "just as bad as some of the houses I was seeing on TV. I certainly didn't feel I was as much of an emotional wreck as some of the people on TV, although in my own way, I probably was."

She worries about tripping, about breathing mold, about fire hazards. For a while the house had mice, but eventually she got rid of a couch that sheltered the rodents. During a good week, LaFevers is able to fill a few small bags of trash, but she describes throwing things away as "actually phys-

BEST-LAID PLANS

"Hoarders can be very creative people. You take a basket of broken eyeglasses into a group of hoarders and say, 'What can you do with this?' and they come up with all sorts of things. ... They don't want to waste anything," Korn-

blum says.

LaFevers is a storyteller and historical re-enactor, hired to perform at schools, renaissance fairs and other special events. She teaches medieval songs and leads workshops in weaving, dyeing and paper-making. She believes most items are inherently useful.

LaFevers plucks an empty tuna can from atop a random stack. "This could be made into a camp stove," she says, inspecting it and replacing it.

Next she grabs an empty cookie tin that she has had for a vear and runs through a litany of questions posed by housekeeping advice blogger who oes by the handle FlyLady. "Do I use this? Not right

now, but I saved it for a specific use, which is why it's sitting, um, not that bag ... where's the bag it's actually supposed to be with?" LaFevers rummages haplessly through nearby shopping bags.

"I had some sewing supplies in my car that were just loose, and I saved this tin to put those sewing supplies in. So when I find those sewing supplies again, I will put them in this tin," she says.

Does it make you smile, Fly-Lady wants to know.

"It makes me smile," LaFevers says. "It's a fairy tale."

The tin has a cartoon rendering of a Brothers Grimm tale, "Clever Hans." It won't be tossed out today.

Instead, LaFevers snags a torn crafting mat littering the path and deposits it in a small trash can.

"I've been eyeing this, meaning to throw it away for two to three weeks, and I haven't done it," she says. "It's easier for me to step over it than throw it away" — even though she already bought a replacement.

A FAMILY AFFAIR

LaFevers believes her hoarding is rooted in a sensation of childhood powerlessness, a combination of her mother's depression and what she sees as her younger sister having been given free rein to her toys and clothes

"If I complained about it, I was told to let her have it because she was the baby ... so I had no sense of control over my own personal belongings," she says.

According to her sister, Wenoka Young, these items were hand-me-downs, items that LaFevers had outgrown. "Maybe that was somehow traumatic for her, to see me wearing her old clothes?" she says.

Young, 54, says hoarding is nearly as painful for family members as it is for the hoard-

"I go into her house, and then I go home and sob, because it breaks my heart that she's living like this. ... It reaches a point where you can't do anything to help her, because no matter what you do, there's always criticism and fear. Fear of loss, fear that things are going to be taken away from her that are important."

LaFevers knows that hoarding has affected her relationship with her sons. Once her oldest son and his girlfriend spent a weekend cleaning her first story while LaFevers was out of town. They tossed garbage, put things in bins, scrubbed floors and washed dishes. When she returned, LaFevers went through the trash, pulling out items they had thrown away. Then she fell into a depres-

sion that lasted several weeks. In 2013 LaFevers applied to be on Hoarders. "The reason why they turned me down, I was not in a crisis situation. ... I did not have minor children at home, so I did not have DHS breathing down my neck, and I

condemn my house," she says. The casting director told LaFevers she was one of two hoarders who had applied for themselves that season. Usually family members apply on

did not live in the city, so I did

not have the city threatening to

the hoarder's behalf. The next year, LaFevers called Arkansas Crime Scene Clean-up, a Heber Springs company that cleans hoarders' homes. A representative visited and gave LaFevers an estimate — they could clean her house and shed in four days, for \$1,000 a day.

This is out of her price range, and anyway, she decided she wasn't ready to clean.

'I'm getting closer to being ready," she says.

needs more accountability.

Young thinks that LaFevers

vballtop@aol.com Sometimes she has lived with housemates — a subletter, a

friend crashing on the couch,

even, for a few years, Young

and her husband. "When there was someone else at the house, things weren't so out of control,"

Young says. Hoarding runs in families, although scientists are uncertain whether the behavior is learned or genetic.

"In the same family, that has the same poverty and the same unspoken rule that you don't waste something, it makes sense that more than one person would have hoarding issues," Kornblum says.

Young says their childhood home didn't have paths, but most surfaces were cluttered: "My dad was raised in the Depression and has this attitude of not throwing anything away, ever." And there are stories of a paternal great-grandmother the sisters never met, a woman who lived in a house with "little paths."

ONGOING CYCLE

Kornblum doesn't know of any physical support group for hoarders in Arkansas, but there are online groups. She cautions against seeking a "cure" for hoarding.

"It's kind of like an addiction. Someone who has gotten the hoarding under control, some years down the road, if they have a trauma or depression, will likely relapse into hoarding. But it usually means they can get back on track quicker the second or third or fourth time," she says. "It's a lifelong struggle, but there can definitely be major improvement in the quality of someone's life." LaFevers isn't ready to

clean her house, but "I've decided I want help for the shed," she says. "I think I'm ready to tackle the shed.'



A stray cat crouches warily outside the front door of Melinda LaFevers' home.