HEALTH & FITNESS

The Times

Device removes clots; improves odds after stroke

Capital Health first in nation to test experimental procedure

By Matt Fair
STAFF WRITER

TRENTON — Shortly before 1 p.m. last Thursday afternoon, a medevac helicopter bearing a 37-year-old stroke victim alighted on the roof of the city's Capital Health Regional Medical Center. She'd been transfered to the hospital from Freehold's CentraState Medical Center.

She's one among hundreds of patients transferred to the facility's neurosurgery unit every month.

And thanks to what hospital officials describe as its growing prestige in the field, surgeons last week had one more tool at their disposal to help treat her.

Capital Heath Regional Medical Center earlier this month became the first hospital in the country to employ Trevo 2, an experimental device used to remove blood clots from patients suffering non-hemorrhagic, or ischemic, strokes.

"The continued advancement of retrieval devices is critical to our abilities to treat stroke patients," said Dr. Erol Veznedaroglu, director of neurosciences and endovascular & cerebrovascular neurosurgery at Capital Health. "With a time critical disease like stroke, patients need treatment fast and having a broad range of treatment options available is essential to providing patients with the best chance at surviving and limiting associated disabilities."

The device, a half-inch long mesh cylinder, is inserted through an incision in the groin. After running a small tube, or microcatheter, through the femoral artery to the site of the clot, surgeons push the device into the affected blood vessel where it captures the blockage and is pulled back out of the body.

The procedure, known as 'mechanical thrombectomy,' takes about 30 minutes.

While Capital Health was the first hospital to use the experimental device on a patient, it is among five hospitals around the country participating in the trial.

Veznedaroglu said the device is an improvement over its predecessor, the Merci Retriever, which is deployed in an identical fashion as Trevo, but resembles a corkscrew. The corkscrew snags the front of the clot and it then pulled out of the body.

By expanding into the middle of the clot itself, Veznedaroglu said, the device allows some blood flow to be restored immediately upon its deployment as opposed to after the blockage is removed.

Moreover, since the device is manufactured out of nitinol, an alloy known for its elasticity and shape memory, Veznedaroglu said the risk of accidentally puncturing a blood vessel during the procedure was reduced over the Merci Retriever.

"One little puncture in there and it's game over," he said. "It was not without risk."

Trevo 2 was developed by Concentric Medical, a California-based company that specializes in creating endovascular devices for stroke patients.

Capital Health began expanding its neurosurgery unit two years ago when Veznedaroglu and his partner, Dr. Kenneth Liebman, came to the hospital from Thomas Jefferson University in Philadelphia.

Since then, Capital Health has established the Center for Neurologic Emergency Medicine and the Stroke & Cerebrovascular Center of New Jersey in an effort to become the preeminent hospital in the region for the treatment of strokes.

Veznedaroglu said that evidence of Capital Health's stature in the field can be seen in the fact that 129 patients were transferred to the hospital for treatment in January alone.

Indeed, the first procedure with Trevo 2 was performed on a 76-year-old woman who'd been transferred to Capital Health from a hospital in the Vineland area.

"This woman was nearing a coma. She'd lost her speech and was becoming unresponsive," Veznedaroglu said of the patient, who he added was otherwise in good health before suffering the stroke. "We restored complete blood flow. She still has some deficits, it'll take about six months of rehabilitation, but she's moving that side and she's got some speech back."

"I don't know that we would've gotten as immediate a result without Trevo," he added. "(Stroke) is very, very time sensitive."

And while the condition is one typically associated with older people, a recently-released analysis by the U.S. Centers for Disease Control shows that hospitalizations for stroke in males between the ages of 15 and 34 rose by 51 percent from 1994 to 2007.

The hospitalization rate for females in that age group rose by 17 percent. There was a 31 percept increase in boys between 5 and 14, and a 36 percent increase in girls from that age group.

Veznedaroglu said the numbers may be a result of more accurate diagnosis, but he said that higher rates of childhood obesity may likewise play a factor.

"You look at the diabetes in children we see today," he said. "It's something we didn't see when I was in medical school. I think there's a definite parallel."

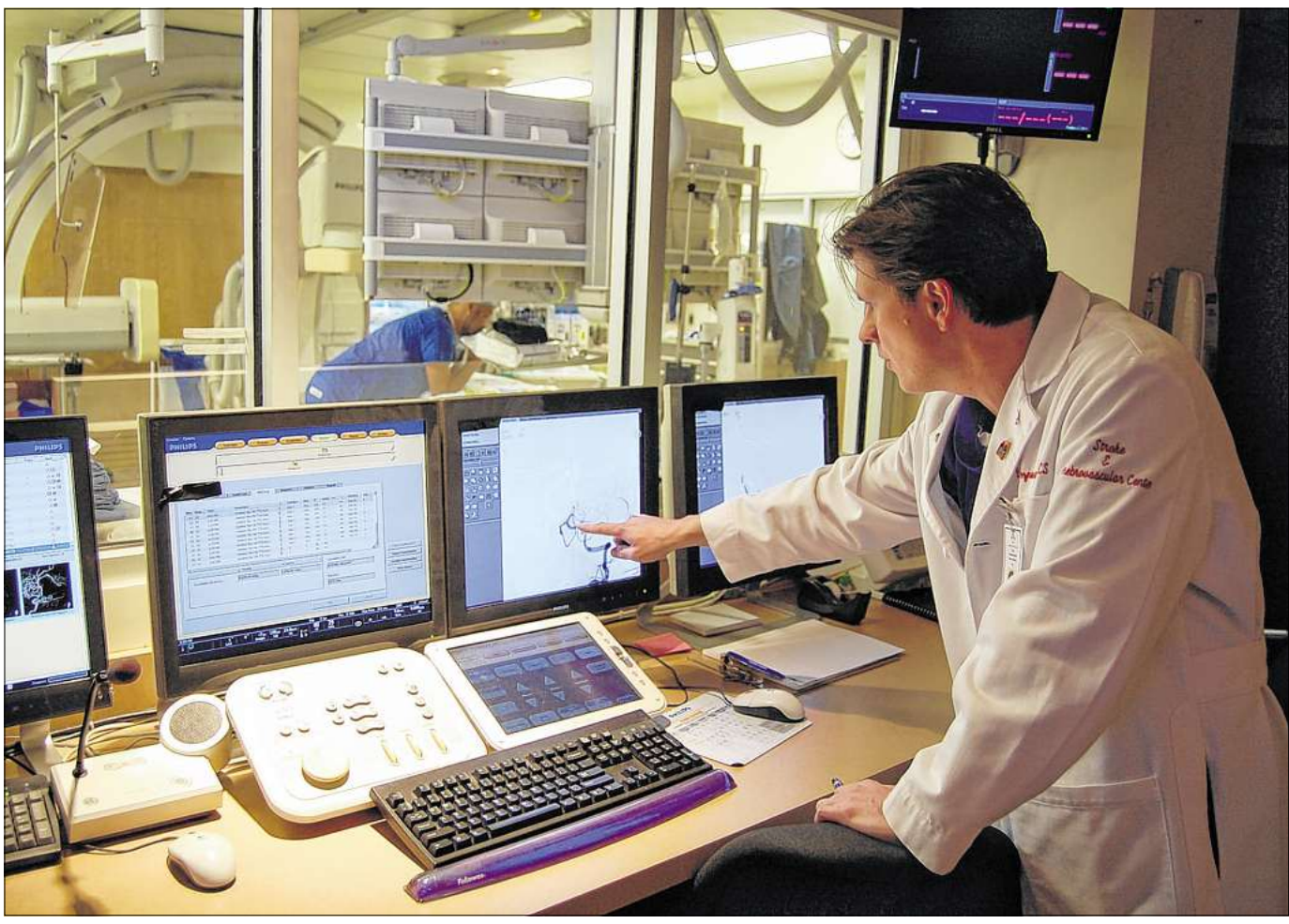
The study itself didn't speculate on what might've cause the increases.

"We cannot link anything in particular to the trend in younger patients," said Xin Tong, a health statistician with the CDC, "but I believe the role of obesity and hypertension will prompt a big discussion. Unfortunately, right now we can't speculate on the causes."

Regardless of age, Veznedaroglu said Capital Health's leadership in the field of stroke treatment was a boon not only to the company but to the residents of Central Jersey.

"Nobody was getting this kind of care in the state," he said. "If this is you or your mom or your dad, you don't want them getting packages off to Philadelphia or New York (for treatment of a stroke). You want them to be able to go too a place that's five minutes away."

Contact Matt Fair at mfair@njtimes.com or at (609) 989-5707.



Dr. Erol Veznedaroglu, director of Nuerosciences and Endovascular & Cerebrovascular Neurosurgery at Capital Health Systems, points out a blood clot in the brain scan of a stroke patient at Capital Health Regional Medical Center in Trenton. The hospital is one of five nationwide helping to test a new device to remove blood clots in stroke victims.

How the sexes view exercise differently

By Vicky Hallett
THE WASHINGTON POST

No one wants to think she's a cliche. But it's time for me to recognize that when it comes to my gym behavior, that's exactly what I am: a cardio-loving woman who has to be forced to hoist a dumbbell.

I would feel worse about this revelation if it weren't for the fact that my husband is just as stereotypical. Every workout is a chance to outdo himself, which inevitably results in soreness, shin splints and other woes. A few months ago, at a boot camp class, he generated so much heat that his head started to steam. I can guarantee that I'll never work that hard.

Luckily, we can both blame it on biology, according to research by Weight Watchers. The organization is best known for counting points, but behind the scenes, staffers are sorting through a lot more complicated data. And some of the most fascinating stuff stems from contrasting male and female attitudes toward weight loss and activity, says chief scientist Karen Miller-Kovach.

For starters, a much higher percentage of the men surveyed believe that exercise is enough to slim down, whereas the women tend to embrace a smarter combination of eating healthier and moving more. "You rarely hear guys say, 'I'm going on a diet.' Instead it's, 'I need to hit the gym,' " Miller-Kovach notes. (That may also explain why men make up just 10 percent of Weight Watchers' membership.)

But the Weight Watchers surveys show men top women when it comes to actually enjoying exercise. "That doesn't mean women don't know they need to be physically active or don't do it," Miller-Kovach says. "But if you're a woman, you're looking at being active as a means to have wine with dinner. For guys, to sweat is a badge of honor."

Then, there's the approach: Women are likely to take small steps toward a goal while men are quick to make sweeping changes, according to the research. "It's the Hundred Years' War versus the Battle of Normandy," Miller-Kovach says. And where we choose to have that fight also differs. For men, it's the weight room. For women, it's anywhere else.

These are all generalizations, and, of course, there are plenty of outliers for both sexes. But you can witness these opposing strategies - and their accompanying weaknesses - if you look around almost any gym. Women clump by the cardio machines, regularly reading magazines and talking, thus lessening the effectiveness of their workouts. Men congregate around the largest of weights, which they proceed to pick up even if that requires heinous form.

Lynda Espada, fitness director of the D.C. Jewish Community Center, says that, from her observations, "Women never want to push it. Men want to push it too much."

Partly, that's because women tend to worry about bulking up no matter how many times they've been told that they'd need to grab some steroids along with that heavier dumbbell to make it happen. For guys, it's the opposite. "They think the more weight, the bigger they will be and the better that is," says Espada, who notes that in reality, more weight than you're ready to handle leads to injuries rather than bulging muscles.

It's possible that men and women would get these messages more easily if they weren't so hung up on preconceived notions of what kind of exercise is appropriate for them. "Guys are thinking about high school even though what they learned doesn't apply to a 40-year-old," says Robert Sherman, the group fitness manager for Equinox's Washington area clubs. If Sherman had his way? He'd make sure every man made time for yoga and that every woman put strength classes on her schedule.

Over the past few years, that's started to happen more as older exercisers have been warned by their doctors to change up their routines and younger ones have brought their evolving attitudes to the gym.

But there's still an intimidation factor when it comes to the unknown. Espada understands when new female clients tell her they've shied away from weights because they've never been fully introduced to what to do with them. She felt the same way 20 years ago when she first breached the boys' club. "I start slowly so they get comfortable," she says. "And when they see they can do it, they realize it's fine."

As for enjoyment and exercise, Miller-Kovach suspects that has to do with the typical American upbringing. As kids, boys are weaned on such sports as football, soccer, baseball and basketball. "But women are more likely to have been raised in environments where activity wasn't a part of their lives," she says. When you don't have those positive associations from childhood to bolster your interest in staying active, the fun factor plummets.

SHOWTIMES

MERCER

HAMILTON AMC Hamilton 24, 325 Sloan Ave. (888) 262-4386 **The Adjustment Bureau** (PG-13) 11:20, 12, 1:45, 2:35, 4:10, 5, 6:35, 7:35, 9, 10:15. **Beastly** (PG-13) 12:20, 2:30, 4:50, 7:05, 9:35. **Big Mommas: Like Father, Like Son** (PG-13) 11:15, 2:15, 5:05, 7:45, 10:25. **Black Swan** (R) 2, 7:55. **Drive Angry 3D** (R) 12:40, 3:15, 5:40, 8:05, 10:30. **The Fighter** (R) 11:05, 4:45, 10:35. **Gnomeo and Juliet** (G) 1, 3:10, 5:20, 7:30, 9:40. **Gnomeo and Juliet 3D** (G) 11:40, 1:55, 4:15, 6:25, 8:35. **The Grace Card** (PG-13) 12, 4:55, 9:55. **Hall Pass** (R) 11:35, 1:20, 2:20, 4, 4:55, 6:40, 7:40, 9:20, 10:20. **I Am Number Four** (PG-13) 10:55, 1:25, 4:05, 6:45, 9:25. **I Am Number Four The IMAX Experience** (PG-13) 11:45, 2:25, 5:05, 7:45, 10:25. **Just Go With It** (PG-13) 10:55, 1:50, 4:35, 7:35, 10:35. **Justin Bieber: Never Say Never** (G) 11, 1:30, 4:30, 10:10. **Justin Bieber: Never Say Never - Director's Fan Cut 3D** (G) 2:40, 7:55. **Justin Bieber: Never Say Never 3D** (G) 12:05, 5:30, 10:35. **The King's Speech** (R) 10:55, 1:35, 4:15, 7, 10. **No Strings Attached** (R) 2:25, 7:20. **Rango** (PG) 11:30, 12:50, 2:05, 3:25, 4:40, 6, 7:15, 8:40, 9:50. **RISE Encore** (Not Rated) 7:30. **The Roommate** (PG-13) 12:25, 2:45, 5:10, 7:25, 9:50. **Take Me Home Tonight** (R) 12:30, 3, 5:30, 8, 10:30. **True Grit** (PG-13) 11:10, 1:40, 4:20, 7:10, 9:45. **Unknown** (PG-13) 11:25, 1:05, 2:10, 3:45, 4:50, 6:30, 7:50, 9:15, 10:30.

PRINCETON Princeton Garden, 160 Nassau St. (609) 683-7595 **The Adjustment Bureau** (PG-13) 6:50, 9. **Cedar Rapids** (R) 7:10, 9:15.

WEST WINDSOR United Artists Market Fair Stadium 10, 3521 Route 1 (609) 520-8700 **The Adjustment Bureau** (PG-13) 2, 4:30, 7:30, 9:55. **Drive Angry 3D** (R) 1:45, 4:45, 7:15, 10. **Gnomeo and Juliet 3D** (G) 1:55, 4:05, 6:30, 9:10. **Hall Pass** (R) 2:05, 4:40, 7:25, 10:05. **I Am Number Four** (PG-13) 1:50, 4:35, 7:10, 10:10. **Just Go With It** (PG-13) 1:25, 4, 6:40, 9:25. **Justin Bieber: Never Say Never - Director's Fan Cut 3D** (G) 1:35, 7:05. **Justin Bieber: Never Say Never 3D** (G) 4:25, 9:45. **The King's Speech** (R) 1:20, 4:10, 6:55, 9:40. **Rango** (PG) 1:30, 4:15, 6:50, 9:30. **Unknown** (PG-13) 2:10, 4:50, 7:20, 9:50.

EAST WINDSOR Multiplex Cinemas at Town Center Plaza, 319 Route 130 North (800) 315-4000 **The Adjustment Bureau** (PG-13) 1:45, 4:30, 7:15. **Barney's Version** (R) 12:20, 3:15, 6:45. **Beastly** (PG-13) 12:35, 2:45, 4:55, 7:05. **Black Swan** (R) 2:55, 5:10. **Drive Angry** (R) 4:10. **The Fighter** (R) 4:10, 6:45. **Gnomeo and Juliet** (G) 12:40, 2:45, 5, 7:10. **Hall Pass** (R) 12:25, 2:55, 5:25, 7:55. **I Am Number Four** (PG-13) 1:10, 4:05, 7. **Just Go With It** (PG-13) 1:25, 4:15, 7:05. **Justin Bieber: Never Say Never - Director's Fan Cut 3D** (G) 5:10, 7:45. **Justin Bieber: Never Say Never 3D** (G) 12, 2:35. **The King's Speech** (R) 1:10, 3:50, 6:40. **Rango** (PG) 12:15, 2:45, 5:15, 7:45. **Take Me Home Tonight** (R) 12:50, 3:10, 5:30, 7:50. **True Grit** (PG-13) 1:25. **Unknown** (PG-13) 1:30, 4:25, 7:10.

BUCKS

BENSALEM AMC Neshaminy 24, 3900 Rockhill Drive (888) 262-4386 **Beastly** (PG-13) 10:50, 1, 3:20, 5:40, 7:50, 10:10. **Big Mommas: Like Father, Like Son** (PG-13) 10:55, 1:45, 4:15, 6:45, 9:25. **Black Swan** (R) 11:25, 4:55, 10:05. **Cedar Rapids** (R) 11:05, 1:25, 4:10, 6:25, 8:50, 11. **Drive Angry 3D** (R) 12:55, 3:25, 5:50, 8:20, 10:55. **The Fighter** (R) 11:45, 2:20, 5:10, 7:55, 10:45. **Gnomeo and Juliet** (G) 12:50, 3:10, 5:20. **Gnomeo and Juliet 3D** (G) 11:35, 1:50, 4:10, 6:20, 8:40, 10:50. **The Grace Card** (PG-13) 11:10, 1:55, 4:25, 10:25. **Hall Pass** (R) 11:40, 12:40, 2:10, 3:05, 4:40, 5:35, 7:10, 8:10, 9:50, 10:55. **I Am Number Four** (PG-13) 7:45, 10:30. **I Am Number Four The IMAX Experience** (PG-13) 12:45, 3:15, 5:45, 8:15, 10:50. **Just Go With It** (PG-13) 10:55, 12:35, 1:35, 4, 4:35, 6:35, 7:35, 9:35, 10:35. **Justin Bieber: Never Say Never - Director's Fan Cut 3D** (G) 11:15, 4:15, 7:05. **Justin Bieber: Never Say Never 3D** (G) 1:45, 9:55. **The King's Speech** (R) 10:50, 1:30, 4:05, 6:50, 9:30. **No Strings Attached** (R) 12, 4:45, 9:45. **Rango** (PG) 11, 12, 1:30, 2:30, 4:05, 5, 6:40, 7:40, 9:20, 10:20. **RISE Encore** (Not Rated) 7:30. **The Roommate** (PG-13) 2:25, 7:15. **Take Me Home Tonight** (R) 11, 1:40, 4:20, 7:20, 10. **True Grit** (PG-13) 2:05, 7:25. **Unknown** (PG-13) 11:20, 1:15, 2:15, 4, 4:50, 6:30, 7:30, 9:15, 10:15.

DOYLESTOWN County Theatre, 20 E. State St. (215) 345-6789 **The African Queen** (Not Rated) 7:30. **The King's Speech** (R) 3, 8. **Rabbit Hole** (PG-13) 3, 5:30. **Somewhere** (R) 5:30.

NEWTOWN Newtown, 120 N. State St. (215) 968-3859 **Rango** (PG) 7.

LANGHORNE United Artists Oxford Valley Stadium 14, 403 Middletown Road (215) 750-3390 **The Adjustment Bureau** (PG-13) 1:50, 4:30, 7:10, 9:50. **Beastly** (PG-13) 2:40, 5:20, 7:30, 9:40. **Big Mommas: Like Father, Like Son** (PG-13) 1:25, 4, 6:40, 9:45. **Drive Angry 3D** (R) 2:45, 5:25, 8:05, 10:30. **Gnomeo and Juliet 3D** (G) 1:40, 4:20, 7, 9:35. **Hall Pass** (R) 2:10, 5, 7:40, 10:10. **I Am Number Four** (PG-13) 2:50, 5:30, 8, 10:30. **Just Go With It** (PG-13) 1:55, 4:35, 7:25, 10:05. **Justin Bieber: Never Say Never - Director's Fan Cut 3D** (G) 1:30, 7:15. **Justin Bieber: Never Say Never 3D** (G) 4:25, 9:55. **The King's Speech** (R) 1:35, 4:50, 7:35, 10:25. **Rango** (PG) 1:30, 2, 4:10, 4:40, 6:50, 7:20, 9:30, 10. **Take Me Home Tonight** (R) 2:30, 5:10, 7:50, 10:20. **Unknown** (PG-13) 2:20, 5:15, 7:45, 10:15.

BURLINGTON

BURLINGTON Regal Burlington Stadium 20, 250 Bromley Blvd. (609) 239-3500 **The Adjustment Bureau** (PG-13) 1:40, 4:40, 7:20, 10. **Beastly** (PG-13) 12:30, 2:50, 5:30, 8, 10:30. **Big Mommas: Like Father, Like Son** (PG-13) 12:25, 1:35, 3:10, 3:40, 4:20, 6:15, 8:55, 9:30. **Black Swan** (R) 12:40, 3:30, 6:50, 9:40. **Drive Angry 3D** (R) 1:10, 4, 6:40, 9:25. **Gnomeo and Juliet** (G) 1:25, 3:55, 6:45, 9:15. **Gnomeo and Juliet 3D** (G) 12:45, 3:15, 5:35, 7:55, 10:35. **The Grace Card** (PG-13) 12:35, 6:30. **Hall Pass** (R) 1:30, 4:30, 7:50, 10:35. **I Am Number Four** (PG-13) 12:45, 3:35, 6:25, 9:20. **Just Go With It** (PG-13) 12:55, 3:45, 6:35, 9:35. **Justin Bieber: Never Say Never** (G) 1:55, 4:55, 8:05, 10:40. **Justin Bieber: Never Say Never - Director's Fan Cut 3D** (G) 1:15, 7:25. **Justin Bieber: Never Say Never 3D** (G) 4:15, 10:15. **The King's Speech** (R) 1:05, 4:20, 7:30, 10:25. **Open Captioned Performance - Selected Film - Daily** (Not Rated) . **Rango** (PG) 12:20, 1:20, 3:20, 4:10, 6:20, 7, 9:10, 9:50. **RISE Encore** (Not Rated) 7:30. **The Roommate** (PG-13) 1:45, 5:20, 8:10, 10:40. **Take Me Home Tonight** (R) 2:10, 5, 7:40, 10:20. **Unknown** (PG-13) 12:50, 3:50, 7:10, 10:05.

HUNTERDON

FLEMINGTON Americanplace Movies Cinema Plaza 6, 240 Routes 202/31 (908) 782-2777 **Gnomeo and Juliet** (G) 5:05, 6:35, 8:10. **Hall Pass** (R) 6, 8. **I Am Number Four** (PG-13) 5:30, 7:45. **The King's Speech** (R) 5:20, 7:40. **Take Me Home Tonight** (R) 5, 7:20. **Unknown** (PG-13) 5:25, 7:35.

MIDDLESEX

NORTH BRUNSWICK Regal Commerce Center Stadium 18, 2399 Route 1 South (732) 940-8343 **The Adjustment Bureau** (PG-13) 1:30, 4:30, 7:20, 10. **Beastly** (PG-13) 1, 3:10, 5:20, 7:35, 9:40. **Big Mommas: Like Father, Like Son** (PG-13) 1:35, 4:10, 7:05, 9:50. **Drive Angry 3D** (R) 1:55, 4:25, 6:55, 9:45. **Gnomeo and Juliet** (G) 2, 4:35, 6:40, 8:50. **Gnomeo and Juliet 3D** (G) 2:35, 5:05, 7:15, 9:20. **Hall Pass** (R) 2:10, 4:45, 7:45, 10:15. **I Am Number Four** (PG-13) 1:10, 3:50, 6:25, 9:05. **Just Go With It** (PG-13) 1:25, 4:05, 6:45, 9:25. **Justin Bieber: Never Say Never - Director's Fan Cut 3D** (G) 1:20, 7:10. **Justin Bieber: Never Say Never 3D** (G) 4:15, 9:55. **The King's Speech** (R) 1:15, 4, 6:50, 9:35. **Patiala House** (Not Rated) 2:30, 5:45, 9. **Rango** (PG) 1:40, 2:20, 4:20, 5, 7, 7:40, 9:30, 10:10. **RISE Encore** (Not Rated) 7:30. **Take Me Home Tonight** (R) 12:55, 3:15, 5:35, 7:55, 10:20. **Tannu Weds Mannu** (Not Rated) 2:45, 6:15, 9:15. **True Grit** (PG-13) 1:05, 3:45. **Unknown** (PG-13) 1:50, 4:50, 7:25, 10:05.

SOMERSET

BELLE MEAD Montgomery Cinema, 1325 Route 206 (609) 924-7444 **Barney's Version** (R) 1:50, 4:30, 7:10. **Biutiful** (R) 2:55, 6. **Black Swan** (R) 2:25, 4:45, 7:05. **Cedar Rapids** (R) 2:50, 5:10, 7:30. **The King's Speech** (R) 2:15, 3:25, 4:50, 6, 7:25.