Creative Learning Center provides summer instruction, fun

As soon as you walk into Paula LeBlanc’s music room at Rocky Ridge Elementary School, you are hit with a burst of sound—and energy. LeBlanc is directing her class of eight students as they prepare a children’s patriotic song to perform in front of fellow students and parents in three short days as part of their Arts in the Park program. The students can’t sit still. They move their arms and legs with the words of the song and sway back and forth. And they sing loudly.

“We have a lot of energy in here,” says LeBlanc. “Fortunately, it is amazing and talented energy.” The children are at Rocky Ridge as part of UAB’s Children’s Creative Learning Center, a summer enrichment program that offers instruction in art, literacy, math and science. The UAB School of Education has sponsored the program for the past 40 years; the endeavor is in partnership with the Hoover Board of Education.

Classes are available for up to six weeks for children ages 3 to 12. This year’s program, with the theme Summer on Broadway, began in June and offered students a chance to learn about New York as they sharpened their reading, math and science and technology skills.

Abby Hankins, program manager, is a former student of the summer program. She says the opportunities afforded to those who take part in the Creative Learning Center are numerous.

“There is something for every child who participates in the program,” Hankins says. “The 3-year-olds begin building their autonomy and acquiring the skills needed for school. The 7-year-olds have numerous options to enrich their reading and math skills. And our older kids have a hands-on opportunity to learn more about

Traffic on University Boulevard traffic to change July 15

Beginning July 15, some lanes along four blocks of University Boulevard will be closed for as many as 10 days to accommodate critical construction for the UAB District Steam System project.

Senior Project Manager Jerry Corvin says the two westbound lanes will be redirected to one lane on the south side of University between 14th and 18th streets beginning at 6 p.m. Friday, July 15. Traffic heading east on University also will be tapered to one lane for approximately four blocks.

Construction crews will install steam supply and condensate piping beneath University Boulevard to connect two steam vaults under construction next to the Campus Recreation Center and on the north side of Parking Lot 5A.

The traffic plan was approved by the Alabama Department of Transportation. UAB Police Department personnel will be stationed at the west and east ends of the project 24 hours a day for the duration of the work to aid traffic flow.

Russo Corporation has contracted to complete the piping installation and connection within 10 days. Russo will work two 12-hour shifts for the duration of the effort. Extra equipment, including lights, pumps, welding equipment and additional crews and backups, will be on standby in the event of a major rain or other unforeseen event.

“We have to get this done; it’s imperative. We hope to get the piping in with as minimal disruption as possible before school starts,” Corvin says.

Once construction across the westbound lanes is completed, traffic flow will be switched to permit work beneath the eastbound lanes.

Corvin says the construction will bring with it some inconveniences for the 10-day period. Drivers going to Children’s Hospital are encouraged to use the entrance on Seventh Avenue; for example, drivers traveling east on University will not be able to use the Children’s Hospital parking deck entrance for most of the 10-day construction period.

Sidewalk traffic also will be affected. The north sidewalk will be closed initially to correspond with the construction work, and the south sidewalk will remain open; it will reverse when work begins on the west bound lanes of University.

“As always, we just ask that everyone be patient,” Corvin says. “We know this will affect many people, but we hope to wrap things up with this quickly.”

Updates on the District Steam System Project will be available at www.uab.edu/steamproject.

Project on schedule

The construction is made necessary by Alabama Power Company’s plan to shut down its existing steam plant in 2013.

The new distribution network will replace the existing steam system and construction of a new condensate-return system will provide high-quality steam service to the campus, research and medical center facilities, including the VA Hospital, Callahan Eye Hospital and Southern Research Institute, when Alabama Power discontinues its steam operation in February 2013. The new condensate-recovery system will result in energy savings and reduction of domestic water consumption, which supports UAB’s Green Policy.
When Andries Steyn, Ph.D., moved to the United States from South Africa in 1994 to finish his doctorate, he thought he was here to stay.

“I became a citizen, and I thought I’d never go back,” Steyn says.

But a collaboration between the Howard Hughes Medical Institute and the University of KwaZulu-Natal in South Africa is bringing the Cape Town native back home. Steyn, associate professor in the UAB Department of Microbiology, is the first investigator recruited to work in the new KwaZulu-Natal Research Institute for Tuberculosis and HIV (K-RITH) in South Africa. HHMI is the largest non-federal supporter of biomedical research and has committed $60 million to the initiative.

Construction is under way on a state-of-the-art TB clinical and research facility in Durban, which is ground zero for where the first extensively drug-resistant case of tuberculosis was found a few years ago.

“This facility will be like no other in the world,” Steyn says. “It will create unparalleled opportunities for investigators here at UAB that are interested in infectious disease, in particular TB, HIV and other pulmonary diseases.”

Steyn will retain his faculty position and lab at UAB, an affiliation that will foster the educational and research goals of both UAB and K-RITH. One possibility is an educational exchange for students, post-doctoral research fellows and other faculty between K-RITH and UAB.

“For Adrie as an individual and UAB as an institution, to be the lead person and lead institution in setting up this program is quite unique and very exciting,” says Robert Kimberly, M.D., professor and senior associate dean for research in the School of Medicine. “Adrie is a very distinguished investigator, and HHMI has confidence that he has an enormous amount of potential to help move our understanding of TB forward and to combat it.”

Worldwide, somebody dies every 10 seconds from TB. No one is isolated from the disease; one-third of the world’s population is infected with TB, according to the World Health Organization. Drug-resistant cases were reported to be on the rise in many areas of Europe this past spring, with some rates reporting in 75 cases per 100,000 people. But the statistics are much worse in South Africa, Steyn says, where the TB incidence rate in some regions reaches as high as 1,100 per 100,000 people—many of whom are also HIV-positive.

Steyn recently visited the 1,000-bed King George Hospital in Durban, where almost every patient there was being treated for extremely drug-resistant (XDR) and multi-drug resistant (MDR) TB. The first floor of the hospital treated children as young as 5 months to 5 years old. Half of them also had HIV, and half were orphans.

“That’s just one of the hospitals,” Steyn says. “People come to the hospitals with XDR; they’re given the drugs and told, ‘Sorry we full,’ and they go back home. Then they go back home and maybe use the drugs, but then they disseminate the disease to the rest of their family and the cycle just goes on and on. And of course if you have XDR and HIV together, when it first was reported, the survival time was 24 days and most of the people died after the 24 days. It’s devastating.”

Steyn plans to study the mechanisms of mycobacterial persistence, or dormancy. He hopes to discover how TB escapes drug therapy and investigate ways to develop new vaccines that work against the disease; a new drug to combat TB has not been discovered since the 1990s.

At K-RITH, Steyn and his team of investigators will be able to take their molecular biology research to the clinic and to patients.

“It’s an incredible, once-in-a-lifetime opportunity,” says Steyn.

That’s also true for UAB faculty and students. Steyn and Kimberly say there is enormous potential to develop exchange programs to further UAB’s commitment as a university to provide remarkable opportunities for its trainees and faculty.

“Sending students or post-docs overseas is a unique experience in training and changing perceptions of the disease by contact with it,” Steyn says. “Many of us in the United States work in infectious diseases, but we have no real-life experience seeing ways in which these diseases affect people in countries like Africa, and this will enable that.”

The School of Medicine already has made the commitment to provide travel funds to students and post docs yet to be identified to South Africa to enhance the exchange program.

“Initially this will be for graduate students and post docs, but our hope is that will expand to include medical student rotations as Adrie gets settled and this program expands at K-RITH,” Kimberly says. “UAB faculty in Zambia also are doing work on TB, and we’re exploring ways in which the program in K-RITH and the program in Zambia can work together.”

Aisha Farhana, Ph.D., a post-doctoral student in Steyn’s lab, says she is looking forward to the opportunities now available.

“I have learned a great deal in the laboratory here,” Farhana says, “but the most important thing is to work closer to patients. We will have more facilities and a strong focus on TB, which is a global effort.”

Steyn says the work he has been able to do at UAB since he came here eight years ago was instrumental in helping him get the investigator position. Those supportive of his efforts, he says, have included Kimberly; David Chaplain, M.D., Ph.D., chair of microbiology; Mike Saag, M.D., director of the Center for AIDS Research; Alfon Balbin, D.O., assistant professor of radiology; and Craig Wilson, M.D., director of the Sparkman Center for Global Health.

Steyn’s on-campus collaborators include Ampum Agarwal, M.D., division director of nephrology; Jack Lancaster, Ph.D., professor of anesthesiology; and Rakesh Patil, Ph.D., professor of molecular and cellular pathology.

“I feel very glad, very blessed, personally to have called UAB home for the past eight years,” Steyn says. “The support I’ve received here is what makes UAB a different place. Your on-campus collaborators, the collegiality, is real here. The colleagues I have here and what they do is exceptional, and it is a key to my success.

“Without them…you know, you can tuck yourself away in a corner and be as small as you want to be. If you tuck yourself away, you’re going to die as a researcher,” he says. “If you’re fairly reasonable and if you look for on-campus opportunities, you will find them. There are a lot of good scientists and exceptional people here. When you collaborate with them it puts you in a different category. It’s crucial to your success.”

A groundbreaking ceremony for the new K-RITH facility will take place in mid July in Durban. Steyn will be there to deliver a seminar. The health and science ministers for South Africa will attend, as will consular officials of various European countries.

Steyn takes lead in global effort against drug-resistant TB
Triplets celebrate 60th birthday with return trip to UAB

The headline and accompanying photos and story in the June 15, 1951 edition of The Birmingham News told quite the story.

There was 31-year-old Sidney J. Hardin, gripping two cigars between his teeth and holding another between his fingers as he tried to strike a match to light them. Beside him is another photo of three babies in an incubator under the headline “1-2-3-gee! It’s a three- ply bundle of sugar and spice.”

Sidney and Clara Hardin were the talk of Birmingham that summer. Clara gave birth to Annette, Lynette and Jeanette in what is believed to have been the first instance of triplets born at old Jefferson-Hillman Hospital on what is now the campus of UAB. Sixty years, one week and one day after the triplets were born, they were together in UAB Hospital’s new Women & Infants Center celebrating their birth with a tour of the 1-year-old facility. The tour was a gift from their niece Jo Ann Canada, a patient care tech in the Trauma Burn Intensive Care Unit.

“I wanted to do something for their 60th birthday that they would never forget,” Canada says. “I thought bringing them here where it all started and giving them an opportunity to see the new Women & Infants Center together would be fun.”

Canada set up a tour with Freda Centor, advanced nursing coordinator in Women & Infants Services. Centor says when she received the e-mail from Canada, she was delighted UAB could be a part of the trio’s 60th birthday present.

“It’s exciting that Jo Ann thought about doing this for her aunts, and that they were so thrilled about coming back,” Centor says. “I think they are impressed with what UAB has done with its Women & Infants Center and excited to come back to their birthplace.”

The triplets, who were naturally conceived, were a big deal after their birth 60 summers ago. The Pep Milk company furnished their milk for one year, and Birmingham Linen furnished their diapers. Gerber Baby Food also gave the family food for the three babies.

It was a good thing, too, considering that Annette, Lynette and Jeanette were children Nos. 6, 7 and 8 for the Hardins; when the triplets were born, they finally evened up the household at four boys and four girls apiece. The Hardins would later add two more children to their family for a total of 10.

The newspaper account of the triplets’ birth says the nurse first notified Hardin he had twins only to come out an instant later and up the number to three. The newspaper never mentioned the girls’ names because they weren’t immediately named. In fact, they were never given middle names. “It was hard enough to come up with three first names,” Annette says.

They were the first sets of multiples to be born in the family, and they all arrived healthy, weighing between 1.5 and 3.5 pounds.

It wasn’t until later that there was some concern about Jeanette. She wasn’t gaining weight like the other two shortly after they went home. When they brought her back to the doctor, it wasn’t long before everyone learned why.

“Lynette and I were stealing her bottles and drinking them,” says Annette. “When they figured that out, they had to separate us from Jeanette.”

Lynette says she and Jeanette — who resemble each other very closely — have always been like twins. They used to have to remind their husbands which one was which when they were together because they looked so similar, especially from behind, she says.

“Annette and I are very similar in a lot of ways,” Lynette says. “Annette never wanted to dress like us — ever.”

“Do you blame her,” Canada chimes in. Canada’s mother, Linda Faye, was the older sister of the 10 children. Canada grew up in Texas and when they made their trips back to Birmingham, she remembers sitting in the back of the car planning on which aunt she was going to visit first.

“My daddy would say, ‘You’re going to your grandma’s first’ and I’d say, ‘No. I want to go to Annette’s first’ or Lynette’s or Jeanette’s. I went to Annette’s most because she had three girls. I loved going to Aunt Lynette’s because she always cooked. And Aunt Jeanette would let me get away with anything. She was one of those aunts that you never got in trouble with for everything. They’re just my favorites.”

All of the triplets have great memories of their youth. Jeanette remembers the three of them helping their daddy pick cotton and watermelons in the field on their farm.

“We were little kids, probably around 4, and not really much help,” Jeanette says. “I remember daddy giving us a toe sack and all three of us would pick cotton and put it in the toe sack. Our daddy used to put us on top of a big truck where the cotton bailer was, and we rode on that back to the barn.”

The triplets, who now live in Blount County within 20 miles of each other, also wound up with big families of their own.

Annette had three daughters and now has seven grandchildren and four great grandchildren. Jeanette has one son, three grandchildren and one great grandson.

Lynette has three children, five granddaughters and one grandson. And one family tradition continues: There are three sets of twins among the group, too. The oldest grandson has twin girls and twin grandsons, and the youngest grandson has twin sons.

Each of the triplets was impressed with the Women & Infants Center. Jeanette’s oldest granddaughter had her baby there this past year.

“I just wish I had this as an option 41 years ago with my child,” Annette says. “This place is just wonderful. I’ve got grandchildren old enough to have children of their own, so I’m going to let them know about this place.”

Canada says her aunts have done so much for her throughout her life that she’s happy to have had the opportunity to give her aunts a gift they won’t forget.

“Growing up in this family was just awesome and amazing,” Canada says. “You never went without anything. It didn’t matter if it was the last dollar in their pocket. If you needed something you were going to get it. And they’re still that way today.”

STEA M P L A NT

Active construction for the $69 million project began in early May and is expected to be completed in October 2012. The new plant and systems then will go through a period of commissioning and reliability testing and be brought completely online in February 2013.

Corvin says the project is on schedule and “going very well,” especially in the high-profile campus areas.

The construction of the steam vaults between Bartow Arena and Campbell Hall is nearing completion. The two vaults have been excavated and concrete has been poured for the walls.

Concrete also has been placed for the vault under construction in Packing Lot 5A between the Hill University Center and Volker Hall. Work on the Rec Center side of University Boulevard has been a little more problematic; workers encountered shallow and dense stone that they are navigating through. “Issues like that are very typical in construction,” Corvin says.

More work will begin within the next three weeks. Corvin expects to issue a notice to proceed to Brice Building Company on the North Loop construction phase by July 15.

Stone Building Company is expected to begin construction on the steam-generation plant at the end of July. The plant will be located at the corner of Sixth Avenue South and 13th Street.

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UAB-led team modifies adult device to breathe life into kids

Pneumonia is the leading cause of infant deaths worldwide. But UAB pediatric researchers have developed an effective, inexpensive way to help breathe life into children in developing countries.

A paper in the July 4, 2011, edition of the journal Pediatrics by UAB neonatologist Wally Carlo, M.D., and colleagues at other institutions, describes a modified device for adults that can safely be used for low-cost, low-maintenance, low-concentration oxygen therapy in infants and small children. Researchers have also updated a similar device for use in neonates.

The novel system developed at UAB allows delivery of the exact oxygen concentrations and flow rates but with even greater accuracy. The new device is particularly important for the thousands of children in developing countries who each year contract pneumonia, the leading cause of infant deaths worldwide, but UAB researchers say the new device may be able to reduce mortality.

In some parts of Sub-Saharan African and Southeast Asia, the death rate from pneumonia in children under 5 can be 10 times higher than in the United States. Many infants and children with pneumonia and other respiratory conditions need oxygen therapy to survive.

“In the developed world, oxygen is delivered to these patients with devices that blend compressed oxygen and compressed air to provide accurate and precise concentrations and flow rates,” Carlo says. “In many developing countries, the reported concentrations and flow rates may not be accurate due to a lack of local availability of compressed air. These devices are expensive and somewhat complex, which further limits their use in developing countries.

“This novel system developed at UAB allows delivery of the exact oxygen concentration by pulling air from the environment using a commercially available device,” Carlo says. “This system was inspired by what we had developed for use in neonates.”

The researchers tested a device in a laboratory setting to determine the necessary concentrations and flows of oxygen suitable for therapy for infants and small children using their unique respiratory systems – a nasal cannula, oxygen hood and oxygen mask.

“The two programs for children 7 to 9 years old and 10 to 12 years old put learning in the hands of the students. The 10- to 12-year-old students focus on technology and the various ways to use it, whether through writing, mathematics or the arts. The 7- to 9-year-old children and their parents can choose the learning platforms they want to engage in, whether it’s enrichment workshops with math, reading and math only workshops or enrichment only workshops.

“The most important is what they found out about what they learned and how engaged they have been.”

One of their recent weekly themes was “New York State of Mind,” and their teachers, Lindsey Hychko, read them books and they looked at photographs of New York City, Patton says. “My kids were coming home talking about the Hudson River and Central Park. Then they did a class in which they wanted to build a New York City in their room, so they did, complete with the Hudson River, the Empire State Building and the Statue of Liberty. They’re really unbelievable what they did, and they’re so proud of it.”

And the class upped their idea for the next. That’s what I think is so amazing; they feel ownership and that they created what they learned.”


CREATIVE LEARNING

CONTINUED from page 1

technology, whether it’s through Microsoft Office, computer and Internet safety, photography and even making movies with computers.

“We have lots and lots of fun.”

Classes for 3- to 6-year-olds are focused in their instruction, setting basic foundations for learning.

Avenue Patton, site coordinator, has been involved with the Children’s Creative Learning Center for the past 10 years. Her 4-year-olds twins Mary Olym and Grayson are participating in this year’s program, and she has been impressed with what they have learned and how engaged they have been.

“One of their recent weekly themes was ‘New York State of Mind,’ and their teachers, Lindsey Hychko, read them books and they looked at photographs of New York City,” Patton says. “My kids were coming home talking about the Hudson River and Central Park. Then they did a class in which they wanted to build a New York City in their room, so they did, complete with the Hudson River, the Empire State Building and the Statue of Liberty. They’re really unbelievable what they did, and they’re so proud of it.”

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“It’s that makes the Children’s Creative Learning Center so unique to me — the fact that the children and their parents have choices in their learning,” says Jennifer Summerlin, also a site coordinator.

“The children don’t have a lot of choices about their learning in school, especially younger kids. Here, if parents want them to have additional instruction in reading or math, they can choose that. They would then have two periods of reading or two periods of math, and then two choices for what to do with their other two periods — art, music, dance, cooking, science, whatever.”

The math and reading enrichment workshops feature individualized instruction for students; typically there are no more than 10 to 12 students in those classes.

“Teachers truly are the cream of the crop,” says Patton.

“They are a group of us teachers who continue to come back and teach in this program because this is what we believe school could be like,” says Summerlin, who has been a part of the program for the past 15 years and has had two daughters participate. “The parents always say that what they learn here isn’t much different from what they learn in school. But because it’s choice and hands on, it’s very engaging and exciting. That’s what I believe school could be like.”

The program also provides opportunities for professional development for area teachers and UAB students; many UAB faculty send their students to the program to observe and work with children.

The camp’s focus has changed continually throughout the years as emphasis in public schools has fluctuated.

“The choice the kids have and the basic structure of the program hasn’t changed, but as reading became more important in schools, parents were asking for a little more reading instruction,” Summerlin says. “And they wanted more math instruction, as well. So as the schools have changed and the emphasis on instruction has changed, the program has changed to meet the needs of what parents are asking to have.”

The camp runs for six weeks, but children can attend for a minimum of three weeks.

More information is available online at www.ed.uab.edu/circle. Summerlin says the program will be back for its 41st year next summer.

“I’m already excited about it,” Summerlin says. “I can’t wait.”