THE DAILY CLIPS

September 14, 2010

News, commentary, and opinion
compiled by the East Carolina University News Bureau from:

The Greenville Daily Reflector
The Raleigh News & Observer
The New York Times
The Wall Street Journal
USA Today
The Charlotte Observer
The Fayetteville Observer
The Greensboro News & Record
Newsweek
U.S. News & World Report
Business Week
Time

East Carolina University News Bureau
E-mail to durhamj@ecu.edu Web site at http://www.news.ecu.edu
252-328-6481
SAT scores in state stay flat  

BY LYNN BONNER, THOMAS GOLDSMITH AND STANLEY B. CHAMBERS JR. - STAFF WRITERS

North Carolina students' performance on the SAT college entrance exam remained nearly flat, with the state's average combined score on the critical reading and math sections creeping up two points over last year to 1008.

State results appear to mirror the nation's, where the average score inched up one point, to 1017.

More high school graduates in local districts took the SAT, reversing a dip last year. The proportion of Durham County students taking the SAT jumped nearly 20 percentage points, while the average score dipped slightly, from 965 to 963.

More than 71 percent of Wake County students took the exam, up from about 67 percent last year. Wake's average score dropped four points, to 1069.

"We are particularly pleased in our percentage of participation," said David Holdzkom, assistant superintendent for research and evaluation for Wake County public schools.

School officials were disappointed at the lower scores, Holdzkom said, but he noted that county students' performance has seen an upward trend over 20 years.

"It was a small dip, but we never want to see any kind of a dip," Holdzkom said.

More Durham graduates took the test because school officials emphasized its importance, said Lewis Ferebee, Durham Public Schools' chief of staff.

"Whether students have their eyes set on a four-year college or not, it's always a good experience to have," Ferebee said. "So we're committed to have as many students as possible have that experience."

Though officials are pleased that more students are taking the test, Ferebee said, the results indicate the district needs a plan to improve scores.

One reason for the decline may be more seniors taking the SAT for the first time, instead of taking a practice test their junior year, he said.

Orange County students' average score increased five points to 1044; the Johnston County average went up six points to 1022; and students in the Chapel Hill-Carrboro district had their average scores jump 15 points, to 1194.

The SAT added a writing section in 2005. The state's average writing score dropped three points, to 477, below the national average of 492.

Most of the state's high school students choose to take the SAT rather than the ACT, though that could change.

The State Board of Education is considering requiring high school students to take the ACT in 11th grade, with the state paying the cost. This year, only 16 percent of the state's high school graduates took the ACT, while 63 percent of the public and private high school graduates took the SAT. Nationally, 47 percent of this year's high school graduates took the SAT.

ACT scores for state students were slightly higher than the national average.

Though this year's SAT performance was nearly flat, the state Department of Public Instruction touted the state's long-term gains. In states where at least half the high school seniors took the SAT, North Carolina showed the largest 10-year gain, according to the state.

lynn.bonner@newsobserver.com or 919-829-4821
State grants uneven pay raises for workers

BY LYNN BONNER AND DAVID RAY NOR - STAFF WRITERS

Thousands of state employees have gone without pay raises for two years while some of their colleagues have seen their wages swell 5 percent, 10 percent and more, even without getting promotions.

Top bureaucrats at the departments of Justice, Health and Human Services and Public Instruction received raises since June 2009.

Among them:

- New SBI Director Gregory McLeod got an 8 percent raise, bringing his pay to $100,298, even before he moved up from the position of Justice Department lobbyist. McLeod got the raise for taking on more complex duties while he was working with legislators, said Julia White, chief policy adviser to Attorney General Roy Cooper.

- Former head of the State Bureau of Investigation’s crime lab, Jerry Richardson, got a 5 percent raise on June 1, less than three months before he was removed from his job. His increase to $98,481 a year came after a state salary study concluded that the pay for people running the lab should go up. The lab’s deputy assistant director also got a raise. Richardson was recently fired after a News & Observer series and an audit questioned the lab’s credibility and fairness.

They weren’t the only ones getting raises. It turns out there are lots of ways for state employees to make more money, even in a lean year when legislators looked for $800 million to cut from the state budget and agencies begged to be spared.

An N&O analysis of salaries from June 2009 to June 2010 found 2,673 employees who got raises but have the same job title. The vast majority of these are people who are getting more money because they gained additional skills, moved from trainee to permanent jobs or are paid by the federal government. A smaller number are people who are getting more money because their duties expanded.

More than 2,300 raises

A state study released Monday found that 2,314 raises were handed out between April 1 and June 30.

Most were legitimate, state officials said, but the report flagged 36 cases where raises were not justified. The section of the study that would identify those employees was redacted, but they are in the departments of Environment and Natural Resources, Administration, Health and Human Services, Transportation, Crime Control, and Insurance, said Margaret Jordan, spokeswoman for the Office of State Personnel.

“Our attorneys have advised us that inappropriate salary increases are not public information,” Jordan said.

Some will likely have to repay the state, she said.

Select employees ended up with more in their paychecks if agency leaders say they took on more responsibilities, even if their job titles don’t show it. The agencies pay for the raises using money left over when they fill jobs with new employees who are paid less than their predecessors.
Rep. Nelson Dollar, a Cary Republican, questioned the need for such raises, called "in-range salary adjustments," when the state is staring at a $3 billion budget hole in the year ahead.

Managers should not get increases at all, he said.

This month, Gov. Bev Perdue's administration told agencies to come up with ways to reduce spending by up to 15 percent next year.

Rep. Mickey Michaux, a Durham Democrat and one of the state's main legislative budget writers, said it's hard to know without examining individual cases whether raises are justified. But lawmakers have questioned some raises in the past, he said, and in some instances employees have had to return money.

**Mental health payrolls**

Administrators at state psychiatric hospitals trying to reverse their troubled history of inadequate oversight and questionable deaths were among those who got bigger paychecks.

Thomas Mahle, director of the state psychiatric hospital in Morganton, got an extra 10 percent for doing without an assistant director during Broughton Hospital's ongoing efforts to comply with federal standards. His salary went up to $126,500.

At Cherry Hospital, the personnel director and director of nursing each received 10 percent raises. Both had responsibilities added to their jobs, state officials said.

"For them to have given any kind of increases, they've had to document additional responsibility," said Lanier Cansler, secretary of the state Department of Health and Human Services. "There's nothing here that's just because I like you."

**Raises at DPI**

State Superintendent of Public Instruction June Atkinson approved raises for top administrators in the department, including a 7.2 percent increase for chief academic officer Rebecca Garland and a 6.9 percent raise for deputy chief academic officer Angela Quick.

Atkinson said she divvied up some of the duties of a position the department no longer has, deputy superintendent, to Garland, who now makes $152,000, and Quick, who got an increase to $130,000.

She also approved raises starting in June for about two dozen employees, including a few secretaries. Those who received raises have taken on such different roles and added so many responsibilities that "they're in a new type of job," Atkinson said.

The department has lost 100 jobs, Atkinson said, and it has had to figure out how to do more with fewer people. Garland, for example, has taken on the task of approving teacher preparation programs at the state's colleges and universities. Quick has worked with national groups developing common educational standards and tests.

lynn.bonner.newsobserver.com or 919-829-4821
Headhunters put UNC-CH, NCSU among top 25 places

FROM STAFF REPORTS

N.C. State University and UNC-Chapel Hill are in the top 25 of at least one poll this autumn.

The Wall Street Journal said its survey of corporate recruiters ranked the two schools among the best places to find job candidates.

N.C. State ranked 19th and UNC 25th in the poll, published Monday by the Journal.

The top-ranked school was Penn State, followed by Texas A&M.

The Wall Street Journal said questionnaires were sent to 842 of the nation's largest companies, asking recruiters to rank colleges and universities on the basis of their preparation of students for the working world.

Recruiters ranked schools that produced the best-trained workers, and those best-equipped to succeed in the working world.

The Wall Street Journal said it assigned 10 points for a first-place vote, 9 for second, and so on.
What it was, was big-time football

RALEIGH

Former UNC-Chapel Hill football coach Dick Crum is sometimes credited with the wry observation that Tar Heel partisans want their favorite university to be regarded as Harvard during the week and as Ohio State on Saturday afternoons.

Fair enough. Excellence in all things is a worthy pursuit – as long as all those things are pursued the right way. So it’s especially dismaying to students, alumni, fans, taxpayers and even those who can’t quite bring themselves to pull for the Blue and White to learn a little more each day about two appalling investigations going on at Chapel Hill.

One is the NCAA’s inquiry into whether some football players at Chapel Hill have broken or otherwise ignored rules tightly controlling their interactions with sports agents. That’s bad enough, but even worse to many is the investigation into whether a tutor employed by the school wrote term papers or otherwise performed inappropriate work for students who also play football.

The first investigation is about the integrity of the athletics department. The second is about the integrity of the academy, about the fundamental role of the first public university to open its doors to students in America.

It’s worth remembering that the University of North Carolina was not founded to field a football team; it was created to educate the sons – and much later the daughters – of the people of North Carolina and prepare them for the world they would face. When it began, only white sons of the people could expect to enroll; 215 years later, UNC-Chapel Hill embraces a diverse student body open to anyone who qualifies. Its faculty, staff and alumni are proud of its reputation for doing things the right way.

Lately many of them are also embarrassed, humiliated and angry that some student athletes may have broken rules of sport or cheated in the classroom, and alarmed that the public has gotten only bits and pieces of information. I’m one of them.

We are not, as former UNC system president Bill Friday observed the other day, used to allegations of wrongdoing in sports or class. It has been more than half a century since such questions were raised. Friday remembers them vividly.

When a sports scandal broke out at his alma mater, N.C. State, early in his watch as UNC president, he could not discover the truth. He later said he “got out a bucket of white-wash, painted over the whole mess and called it concluded.”

But scandal re-emerged, and Friday did something university presidents rarely have the nerve to do: He abolished one of the nation’s most popular sporting events, cancelling the Dixie Classic basketball tournament to put a stop to point-shaving and illegal recruiting. He did it to establish the point that in the UNC system, the administration is in charge, not athletics.

But athletics trouble has often marred the university. Still in its first century, long before anyone could imagine a 17-campus system, trustees of UNC became alarmed “following disorders arising in the first intercollegiate football contests.” In 1890 the trustees “barred all such games,” wrote William D. Snider in “Light On the Hill,” his history of the university.

Concern over campus athletics rose and fell over the decades.

In 1904, controversy arose when faculty members and professionals played on university teams and the national press “scorned” the football program at UNC, Snider wrote. And in 1914, UNC President Edward Kidder Graham campaigned to wrest control of campus athletics from the Alumni Athletic Council and place it under the faculty and administration.

In 1934, UNC President Frank Porter Graham, a former baseball player (and brother of Archie “Moonlight” Graham, briefly of the New York Giants) proposed a highly controversial plan to tightly regulate college athletics – including barring financial aid such as scholarships and banning recruiting. He asked whether student life was to “revolve mainly around a circus” thrust upon the institution.

“Or is it to center around, mainly, the teachers, library, classrooms, laboratories ... the spirit of the place?”

His plan found some but not widespread support. Duke University President William Few, among others, opposed it, and N.C. State’s football coach predicted that “football will be dead within two years.” Eventually the Graham plan died.

Now UNC system President Erskine Bowles and UNC Chancellor Holden Thorp face similar questions of control that UNC officials have faced for at least 120 years.

I think the administration is trying its best to do the right things. Yet the NCAA investigation has placed them in a position of having to clam up. The NCAA has demanded silence, a form of speaker ban the university would not today accept from the General Assembly. Information has dribbled out, eroding away the university’s reputation and leaving the public to wonder whether the university is more accountable to the NCAA than to its own constituency.

As a result, the real trustees and financiers of the UNC system – the public it serves and its taxing citizens – have yet to hear a cogent accounting of what has gone on, whether the university will stand for it, what will be done about it – or who’s in charge.

Jack Betts is a Raleigh-based columnist and associate editor for The Charlotte Observer.
The Washington Post

Report: More women than men in U.S. earned doctorates last year for first time

By Daniel de Vise
Washington Post Staff Writer
Tuesday, September 14, 2010; 3:19 AM

For the first time, more women than men in the United States received doctoral degrees last year, the culmination of decades of change in the status of women at colleges nationwide.

The number of women at every level of academia has been rising for decades. Women now hold a nearly 3-to-2 majority in undergraduate and graduate education. Doctoral study was the last holdout - the only remaining area of higher education that still had an enduring male majority.

Of the doctoral degrees awarded in the 2008-09 academic year, 28,962 went to women and 28,469 to men, according to an annual enrollment report from the Council of Graduate Schools, based in Washington.

Doctoral degrees, which require an average of seven years' study, are typically the last to show the impact of long-term changes. "It is a trend that has been snaking its way through the educational pipeline," said Nathan Bell, the report's author and the director of research and policy analysis for the council. "It was bound to happen."

Women have long outnumbered men in earning master's degrees, especially in education. Women earned nearly six in 10 graduate degrees in 2008-09, according to the new report, which is based on an annual survey of graduate institutions.

But women who aspired to become college professors, a common path for those with doctorates, were hindered by the particular demands of faculty life. Studies have found that the tenure clock often collides with the biological clock: The busiest years of the academic career are the years that well-educated women tend to have children.

"Many women feel they have to choose between having a career in academics and having a family," said Catherine Hill, director of research at the American Association of University Women. "Of course, they shouldn't have to."

Undergraduate women began reaching parity with men in the early 1980s as societal barriers to female scholarship fell away. And then they eclipsed men - so thoroughly that federal officials are now investigating whether some liberal arts schools are favoring men in admissions to preserve some semblance of gender balance.
A freshman seminar at the University of Iowa called "Graduate School: Is It for You?" drew 16 students last year, Associate Provost John Keller said. Fifteen of them were women.

Scholarly attention in recent years has turned to the fallen aspirations of men, who are more likely than women to drop out of high school and more apt to be diverted from higher education into menial labor or prison. Men also join the military in disproportionately numbers.

Overall, women and girls make up 51 percent of the U.S. population. But women have not conquered every corridor of the ivory tower. Men still hold the majority of faculty and administration positions. Women earn less than men at every level of academic rank, according to the American Association of University Professors. Male faculty members earned $87,206 on average and their female counterparts made $70,600 in the 2009-10 academic year. Starting salaries for newly minted faculty members are nearly equal.

Men retained the lead in doctoral degrees until 2008, largely through their dominance in engineering, mathematics and the physical sciences. They still earn nearly 80 percent of engineering doctorates.

The increase in women receiving doctoral degrees resulted from years of persistent gains across several areas of study. In the health sciences, for example, the number has risen at a rate of 14 percent per year over the past decade. Women now earn 70 percent of doctorates in that field. They represent 67 percent of doctoral degrees in education, and 60 percent in social and behavioral sciences.

The same economic forces that drove more women into the labor market sent greater numbers of them into doctoral study, "aware of the increased need for them to make money for their families," Hill said.

Women approached parity with men in law and medical studies in recent years, said Jacqueline E. King, an assistant vice president at the American Council on Education. "Doctoral fields couldn't be far behind," she said.

Liz Nguyen, 25, is a doctoral candidate at the University of Maryland in chemistry, a field in which women have made gains but remain outnumbered. Many of her classmates are women, but the older generation of senior faculty is made up virtually of all men. "It was always just a male-dominated field," she said.

Nguyen said the women she has met in doctoral study are "very strong-willed women. I never saw women like that growing up."

Men may be staging a modest comeback. First-time enrollment in graduate education grew at a slightly faster rate for them than for women in 2009, reversing a long-term trend that has favored female enrollment. Meanwhile, the broader gender gap in higher education seems to be stabilizing. The split in enrollment and degrees remained constant through much of the past decade at about 57 percent women, according to a study King wrote this year.

"In general, higher education has expanded over the years to meet demand from both women and men," she said. "I don't expect that it's ever going to be all women."

Staff researcher Meg Smith contributed to this report.
Medical Industry Ties Often Undisclosed in Journals

By DUFF WILSON

Twenty-five out of 32 highly paid consultants to medical device companies in 2007, or their publishers, failed to reveal the financial connections in journal articles the following year, according to a study released on Monday.

The study compared major payments to consultants by orthopedic device companies with financial disclosures the consultants later made in medical journal articles, and found them lacking in public transparency.

“We found a massive, dramatic system failure,” said David J. Rothman, a professor and president of the Institute on Medicine as a Profession at Columbia University, who wrote the study with two other Columbia researchers, Susan Chimonas and Zachary Frosch.

The study, published on the Web site of The Archives of Internal Medicine, focused on 32 medical doctors and doctoral researchers who were each paid at least $1 million in 2007 and published one or more journal articles the next year.

Most of the doctors and most of the orthopedic journal articles did not disclose their financial relationships with companies, the study found.

Professor Rothman called for stricter disclosure policies, including precise amounts of consulting payments. He said journal readers needed the information to consider the potential for bias.

Dr. Marcia Angell, a former editor of The New England Journal of Medicine, who was not involved with the study, called it “an ingenious study, with unsurprising results.” She added, “It is one more indication of the widespread corruption of the medical profession by industry money.”

“The journals’ lax enforcement of disclosure policies probably reflects the fact that journals, too, are dependent on industry support,” Dr. Angell said in an e-mail to a reporter after reviewing the study.
The International Committee of Medical Journal Editors, responding to criticism, has proposed better disclosure policies in the last two years. But each journal sets its own policy, and critics say many of them have still not gone far enough.

The Journal of Arthroplasty lacked disclosures in 17 of 24 articles in the study. Glen Campbell, head of health sciences journals for the publisher Elsevier, said it required disclosure. “We’re impressed with the quality of research here which clearly shows a collective need for greater adherence by authors and encouragement by publishers to comply,” he wrote in an e-mail.

The Journal of Bone and Joint Surgery, which disclosed the financial ties in seven of 10 articles in the study, said in a statement on Monday that it agreed on the need for improvement and planned to announce tighter policies next year.

“It is important to us that the readers of our research work are fully aware of the sources of support for this innovative research,” the journal editor, Dr. Vernon T. Tolo, director of the orthopedic center at Children’s Hospital Los Angeles, wrote.

The study was based on disclosures by five medical device companies, mostly forced by government investigations. The companies paid about $250 million to consultants in 2007, including royalties, the study says. Zimmer paid $87 million; DePuy Orthopaedics, $63 million; Stryker, $45 million; Biomet, $27 million; and Smith & Nephew, $24 million.

Of that total, $114 million went to 41 doctors, the study said, of whom 32 wrote or were co-authors on orthopedic journal articles the next year. The study focused on a representative sample of 95 of those articles. It said 51 of them, or 54 percent, did not mention the financial relationship with a company. It showed that 25 of the 32 authors did not disclose some or all of the time.

The study does not identify individual doctors or their journal articles. Professor Rothman said he did not know how often the journals required disclosures in 2008, but he said the lack of results showed “a broken system” regardless of who was to blame.

Representatives from Stryker, Zimmer and DePuy had no immediate comment on Monday.

The research focused on doctors paid more than $1 million because that seemed a significant conflict-of-interest that should have been disclosed the next year, Professor Rothman said.

In a further criticism, he said none of the medical journals required authors to disclose exactly how much they had received, making it impossible to distinguish between payments ranging from $10,000 to $8.8 million.

“We’ve got accurate data out there,” he said. “Why aren’t we using it?”
Student Loan Default Rate Is Continuing to Increase

By TAMAR LEWIN

The default rate on federal student loans continued to rise last year, with the rate for students at for-profit colleges — already the highest — rising the fastest.

Education Secretary Arne Duncan said Monday that the overall student loan default rate in the 2008 fiscal year, the latest period for which data is available, was 7 percent, up from 6.7 percent the year before and 5.2 percent in the 2006 fiscal year.

The default rate at public institutions increased to 6 percent from 5.9 percent; at private institutions to 4 percent from 3.7 percent; and at for-profit institutions to 11.6 percent from 11 percent.

The default rates represent a snapshot in time, examining only borrowers whose first loan repayments came due from Oct. 1, 2007, to Sept. 30, 2008, and who defaulted before Sept. 30, 2009. Those who defaulted later were not included in the data; over time, default rates increase substantially.

During the period in question, almost 3.4 million borrowers entered repayment, and more than 238,000 defaulted on their loans.

“While for-profit schools have profited and prospered thanks to federal dollars, some of their students have not,” Mr. Duncan said in a statement Monday. “Far too many for-profit schools are saddling students with debt they cannot afford in exchange for degrees and certificates they cannot use.”

In the 2008-9 award year, students at for-profit schools represented 26 percent of borrowers — but 43 percent of defaulters. The median federal loan debt for students earning associate degrees at for-profit institutions was $14,000.

Most community college students do not take out student loans.

The Obama administration has proposed new regulations to help protect students from
misleading and overly aggressive recruiting practices at some for-profit colleges and to ensure that only eligible students and programs receive aid.

One proposed regulation is meant to protect students from debt they cannot repay by requiring for-profit institutions to prepare students for “gainful employment” or risk losing access to federal student aid. Both student debt levels and incomes after program completion are taken into consideration.

Under the current rules, schools with default rates of 25 percent or more for three consecutive years, or a default rate higher than 40 percent in a single year, lose their eligibility for the federal student aid that provides most of the revenues for for-profit colleges.
September 13, 2010

Suicide Reveals Signs of a Disease Seen in N.F.L.

By ALAN SCHWARZ

ALLENTOWN, Pa. — A brain autopsy of a University of Pennsylvania football player who killed himself in April has revealed the same trauma-induced disease found in more than 20 deceased National Football League players, raising questions of how young football players may be at risk for the disease.

Owen Thomas, a popular 6-foot-2, 240-pound junior lineman for Penn with no previous history of depression, hanged himself in his off-campus apartment after what friends and family have described as a sudden and uncharacteristic emotional collapse. Doctors at Boston University subsequently received permission from the family to examine Thomas’s brain tissue and discovered early stages of chronic traumatic encephalopathy, a disease linked to depression and impulse control primarily among N.F.L. players, two of whom also committed suicide in the last 10 years.

Doctors in the Boston University group and outside it cautioned that Thomas’s suicide should not be attributed solely or even primarily to the damage in his brain, given the prevalence of suicide among college students in general. But they said that a 21-year-old’s having developed the disease so early raised the possibility that it played a role in his death, and provided arresting new evidence that the brain damage found in N.F.L. veterans can afflict younger players.

Thomas never had a diagnosis of a concussion on or off the football field or even complained of a headache, his parents said, although they acknowledged he was the kind of player who might have ignored the symptoms to stay on the field. Because of this, several doctors said, his C.T.E. — whose only known cause is repetitive brain trauma — must have developed from concussions he dismissed or from the thousands of subconcussive collisions he withstood in his dozen years of football, most of them while his brain was developing.

The idea that C.T.E. can stem from hits below the level of concussion — which are endemic to football and all but impossible for doctors to see or manage — is relatively new. Ever since C.T.E. in professional football players began making national headlines in early 2007, it has
generally been ascribed to mistreated or at least cumulative concussions, for which awareness and education can be an antidote.

The diagnosis in Thomas's case was independently confirmed by Dr. Daniel Perl, a professor of pathology at Uniformed Services University of the Health Sciences, the medical school for the United States military.

"It's not unreasonable that aspects of his behavior were related to the underlying brain disease that was detected," said Dr. Perl, adding that he was speaking as an experienced neuropathologist and not on behalf of his organization. "This is real."

He added, "This is a call for a broader range of research into this problem that extends beyond the heavy duty N.F.L. level of athletics."

Thomas is the youngest and first amateur football player to be found with clear C.T.E., which is linked with cognitive impairment, depression and ultimately dementia. One 18-year-old former high school player who died two years ago, and whose name has been withheld by the Boston University researchers at his family's request, had only incipient traces of the disease.

Thomas's parents, the Rev. Tom Thomas and the Rev. Kathy Brearley, requested that their son's case be made public to educate other families about the possible and perhaps addressable risks of football at all levels. About 1.4 million children ages 14 to 18 play high school football every fall, and about three million others play in youth leagues at younger ages.

Thomas's parents emphasized that they did not hold responsible the University of Pennsylvania specifically or their son's youth and high school programs in South Whitehall Township, which is outside Allentown. They also said they were not considering legal action.

"This is an issue beneath the N.F.L. level," Mr. Thomas said. "I want people to take this seriously."

Sitting with her husband on the porch that overlooks the yard where Owen once played, Ms. Brearley added, "We have to think of different options that can take a hearty, meaty, great contact sport but minimize the risk to young people."

Owen Thomas was the second Penn player to commit suicide in five years; running back Kyle Ambrogi killed himself in 2005. The university will honor Thomas at a ceremony before Penn's opening home game against Lafayette on Saturday. He had been elected one of the team's captains before he died.

"Obviously this is a contact sport — could this happen? Absolutely," said Penn Coach Al
Bagnoli, noting how Penn trainers never clear a player with a concussion to return until he withstands appropriate medical scrutiny. “Do people take as many precautions as we can? Absolutely.”

Before Thomas, 21, the youngest player who previously received a diagnosis of C.T.E. was Chris Henry, 26, a Cincinnati Bengals receiver who died in December during a domestic dispute in which he appeared to jump from the back of a moving pickup truck. The only previous non-N.F.L. player with a clear case of C.T.E. was Mike Borich, a former Western Illinois receiver who died in February 2009 after a drug overdose at 42.

The Thomas case will almost certainly prove more arresting to those assessing the long-term risks of football at all levels, as he had developed the disease before leaving college and, for reasons that remain unknown, developed severe depression and killed himself.

“It’s pretty hard to make a jump with one case,” said Dr. James Moriarity, the University of Notre Dame’s head physician, who oversees the athletic department’s medical care. “But if it’s true that that happened, it would kill the sport,” he said, referring to an amateur player getting C.T.E. “As a parent, it’s going to be hard to justify kids going out and doing that.”

Owen Thomas was a third generation college football player. His grandfather Frank Thomas played for Millersville (Pa.) University in the 1930s, and his father played four years at the University of Virginia in the late 1960s.

Owen started playing at age 9 and relished football’s physicality.

“He loved to hit people,” his mother said. “He loved to go into practice and hit really hard. He loved to intimidate. It’s kind of sad. We all love football. We all love watching. We all love these great hits.”

Thomas played three seasons at Parkland High School, talented enough at linebacker and tight end to often play every down of every game — even blocking on punts and kickoffs, one of his favorite responsibilities. He was bright enough to be admitted to Penn’s Wharton School of Business, one of the best undergraduate business programs in the country. He played freshman football and then started the last two seasons on the varsity, earning second-team all-Ivy League honors in 2009 and helping lead the Quakers to the Ivy title.

Dr. Robert Stern, a director of the Boston University group, said the identification of factors like genetics would probably someday explain why some people develop C.T.E. while most do not. Thomas’s case, he said, proves that the disease can begin, and perhaps influence behavior, among football players below the N.F.L. level.
“We don’t know if it’s a specific age, we don’t know if it’s a cumulative number of years of exposure to head trauma, we don’t know what combination of hits to the head set this disease in motion,” Dr. Stern said. “These are critical issues that need to be answered in order to help guide any dramatic policy changes and individual decisions down the road.”

Dr. Stern and other experts in the field emphasized that C.T.E. could not be blamed solely for a person’s suicide. But some of the clues left from Thomas’s case, they said, suggested that the damage in his brain might have exacerbated his sudden depression and compromised his ability to think clearly about his actions.

Thomas left no note and still had his cellphone in his pocket — which his mother said indicated that he was acting on impulse, not forethought.

Dr. Perl said that although links were easy to make in hindsight, lack of impulse control is a consistent manifestation of how executive function can be compromised by C.T.E.’s neurofibrillary tangles and tau protein formations in the frontal lobe of the cerebral cortex. Dr. Perl added that C.T.E. typically impaired a person’s short-term memory — which in a college student approaching exams would be harrowing — but that the relatively mild C.T.E. in Thomas’s hippocampus did not suggest severe memory problems, though that was possible.

Ms. Brearley said she would never know the root of her son’s actions, but the C.T.E. diagnosis gave her solace, if not a solution.

“It gives me some peace in my heart to think this is a missing piece of a jigsaw puzzle,” she said.

Thomas’s parents said they wanted to share his story to warn other families of young football players that C.T.E. and all of its still-unknown ramifications were no longer confined to the N.F.L. In this respect, Owen Thomas will probably become amateur football’s counterpart to Andre Waters, the former hard-hitting Philadelphia Eagle whose suicide in 2006 catalyzed much of the awareness of head injuries in the N.F.L.

Mr. Thomas said he recalled the day he read about Waters’s brain damage in a newspaper. He also remembered what he had thought ever since: “Thank goodness that’s only the N.F.L. — it can’t happen to Owen.”