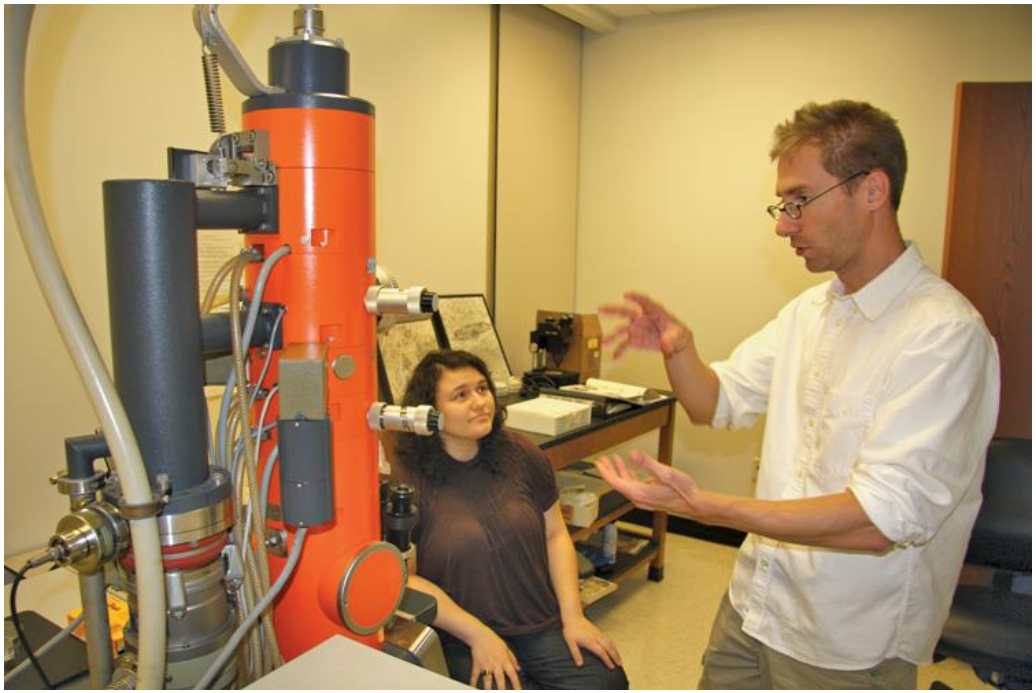
Working with Young Writers



Joe McClain
Ideation magazine
College of William & Mary

URMA 2013

BINGHAMTON UNIVERSITY
STATE UNIVERSITY OF NEW YORK

#urma2013

Mommy, where do interns come from?

- Paid position—up to $10 per hour.
- Typically work 10-15 hours per week.
- Work-study is essentially free.
- Advertise open positions.
- Get them early (freshman/sophomore year). Then try to keep them.

I've never worked with a student writer who had any formal journalism training.

Why target young interns?

- From junior in H.S. to recent graduate.
- Not committed to slate of activities.
- Plenty of time for mind changing.
- Fewer misconceptions to undo.

First conversation: The disclaimer.

I am not an educator.

I will do my best to explain things to you.

If you don’t understand, it’s probably my fault.

(But it’s not my job.)

What does a student writer do all day?

Gofer work/transcriptions

Start on small stories (awards, notices, advances, etc.)

Work up to take on more fully developed research features

Find a story that will allow time for development.

“My roommate thought that I was bringing people coffee all day.”

Conceptual differences

Academic writing vs. journalistic idiom

1. Academic writing: Reader knows more than the writer.

   Journalism: Writer knows more than the reader.

2. Source citing—A.W.: MLA, etc. / J.I.: Attribution

3. Role of writer—A.W.: Expositor / J.I.: Describer

First conversation:

The narrative building blocks

The direct quote

The indirect quote

Unattributed description/explanation

#urma2013

Student-written features

Framing conversation with source.

- *Discuss/decide the story.*
- *Any issues with researcher?*
- *Determine if a student can handle it.*

Working with student writer.

- *Talk out the story.*
- *Any issues with researcher?*
- *Determine if the student can handle it.*
- *Research or preparation necessary.*

Student-written features

Pre-interview coaching.

- *Student prepares list of questions.*
- *Let the subject do the talking.*
- *Remember: It's an interview, not a student-faculty conference.*

Goals:

- *Understand topic.*
- *Secure quotes.*

Knotty concept:
Formulate the question to elicit a response, not just to get an answer.

The metallurgical approach

(Write something, then beat on it.)

Courtney's draft lede:

Around three hundred billion times colder than the fresh April breeze, (seventy billion times colder than liquid nitrogen and a billion times colder than the vacuum of space), the small collection of ultra-cold atoms constitute one of the coldest spots in our universe. However, according to Seth Aubin, these atoms are still not quite cold enough. "We're not yet the coldest in Virginia, but we're getting there" explained Aubin. "Right now, the coldest is at UVA, but we're gonna give them a run for their money." Aubin estimates that his atoms will be the coldest in the state within the next six months.

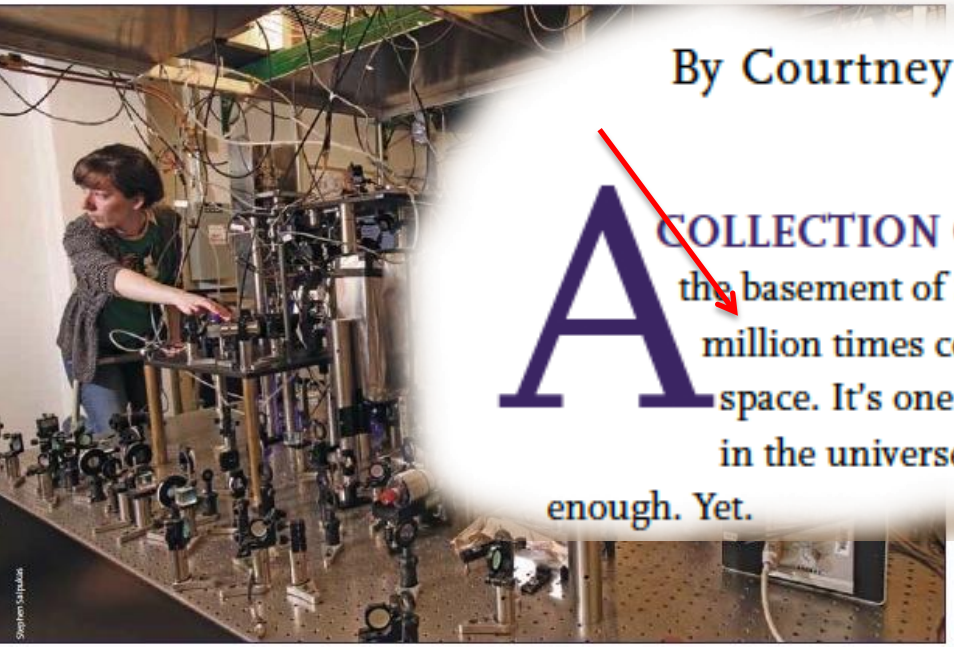
After hammering:

A collection of atoms in the basement of Small Hall are a billion times colder than the vacuum of space. It's one of the coldest spots in the universe, but it's not cold enough just yet.

Courtney Wickel, now a curator in the Smithsonian

COLD & ULTRACOLD

Chilled atoms are going to heat up scientific opportunities



By Courtney Wickel '11

A COLLECTION OF ATOMS IN the basement of Small Hall is a million times colder than outer space. It's one of the coldest spots in the universe, but it's not cold enough. Yet.

Looking away from the experiment is necessary for researchers (from left) Megan Ivory, Austin Ziltz and Seth Aubin. The team watches a computer monitor to track the transition of rubidium-87 atoms into the Bose-Einstein Condensate. 'Eureka!' will be called when a round blob on the monitor becomes oblong.

Stephen Salpukas

By Courtney Wickel '11

A COLLECTION OF ATOMS IN the basement of Small Hall is a million times colder than outer space. It's one of the coldest spots in the universe, but it's not cold enough. Yet.

Seth Aubin has big plans for these tiny particles. A group led by Aubin, assistant professor of physics at William & Mary, is putting finishing touches on an apparatus that will chill atoms to near absolute zero. At such ultracold temperatures, the quantum nature of atoms takes over and they begin to follow an altogether different set of physical laws than atoms at room temperature—laws that Isaac Newton never dreamed of.

Atoms normally move about according to classical Newtonian physics. Aubin explains, like apples falling from trees or billiard balls colliding on a pool table. However, under certain extreme conditions—in this case, cold—Newtonian laws don't hold and physical behavior can only be described by quantum mechanics. Under extreme temperature conditions, atoms begin "behaving less like billiard balls and more like waves," he says.

Aubin plans on exploiting the non-Newtonian properties of ultracold atoms to investigate fundamental questions in quantum physics. But, for Aubin's atoms to enter the quantum regime, they need to be cold enough. Specifically, atoms need to be on the order of a hundred nanokelvin—a hundred billionth of a degree Kelvin—before they start displaying the desired wavelike properties. To put that number in perspective, 0 degrees Kelvin is absolute zero; it is theoretically impossible [illegible] absolute zero.

once you get cold enough, they all clump together. They say, 'that's it, we don't need to be different. We're all going to be the same.'" Aubin explains that atoms oscillating in phase are acting according to the laws of quantum mechanics.

CATCHING A WAVE

Because atoms are so small, Aubin uses laser-generated images to monitor the atoms throughout the cooling process. On the lab's computer monitor, a clump of about a hundred million atoms appears as a red [illegible]lobular blob. "It always starts off round," [illegible]scribes Aubin. "As you go colder, it gets [illegible]aller but it stays round. When they become [illegible]mpletely quantum, they stop being round. [illegible]y get very elongated. That oblong-ness is a [illegible]racteristic of their wave nature. Instead of [illegible]g a blob, you actually get a whole bunch [illegible]obs that are evenly spaced—essentially, [illegible]ave."

[illegible]t takes both science and engineering [illegible]make the transition from Newton to quantum. The first thing you notice in Aubin's research laboratory is the seemingly random disarray of mirrors and lenses scattered across two large optics tables. However, Aubin explains that the assembly of optics is anything but random: "Whenever my family or my friends come to visit, they'll say, 'Seth, your table's a big mess. Why don't you clean all this stuff up?' But, really, if any of this moves by between ten and a hundred microns, it won't work."

These mirrors and lenses concentrate and direct the lasers responsible for the initial cooling phase. Aubin concedes that it seems counterintuitive to use lasers as a cooling device. "It is true that if you shoot a laser at something, it will get hot," confirms Aubin. However, in terms of entropy, the thermodynamic measure of the order of a system, lasers are extremely cold.

"Laser light is made up of photons, the particles of light, and all the particles are identical," explains Aubin. With the same direction, polarization and wavelength, the

continued on page 8

[illegible]BUT ULTRA COLD IS)

[illegible] regular [illegible] radiation [illegible]cy of [illegible] of time," [illegible]structing [illegible]ors thesis. [illegible]ccurate to within [illegible] and need at least a meter of vertical room. Seth Aubin hopes to show in principle that a cold-atom atomic clock can be made much smaller, while limiting trade-offs in accuracy.

Gvakharia's atomic clock is one of several spin-offs coming from the Aubin's lab's investigation of cold atoms. Aubin explains that all atoms display an internal waviness. Occasionally, this waviness is interrupted when two atoms collide. Such interruptions, or "clock shifts," are responsible for that one second of drift every billion years.

Aubin explains that traditional atomic clocks send a fountain of cold atoms into the air, while an ultracold atom clock uses a magnetic trap to cool and hold atoms. Cold atoms move more slowly than room-temperature atoms; they make better atomic clocks because they have fewer colliding atoms. Ultra-cold atoms can have fewer yet; but there's a trade off, because trapping ultra-cold atoms concentrates their density, increasing the clock shift.

To make a smaller clock, Aubin hopes to use fermions, particles with an inherent repulsive nature. Aubin expects the mutually repellent fermions will minimize collisions between the particles—and increase clock accuracy.

Stephen Salpukas

Sandro Gvakharia works on assembling the components of a small atomic clock in Aubin's lab.

Accurate timekeeping is important to a number of applications. For example, your dashboard GPS works by measuring the time between signals sent and received between your car and a set of satellites. The importance of accurate timekeeping increases as distances grow.

Aubin notes that the lab receives funding from the Virginia Space Grant Consortium—itself funded by NASA, which wants the most accurate clocks possible to improve their tracking of deep-space probes, which may benefit from the construction of more compact atomic clocks. His lab has also received support from the Jeffress Memorial Trust and the Army Research Office.

—Courtney Wickel

Some common issues

Getting the details; getting them right.

Name of institution.

Titles for faculty/researchers. (What's a post-doc?)

Mention of centers, schools, departments, programs.

I don't oppress them too much with AP or other style.

Some common issues

Front-loading the copy

Andrea wrote (not a lede):

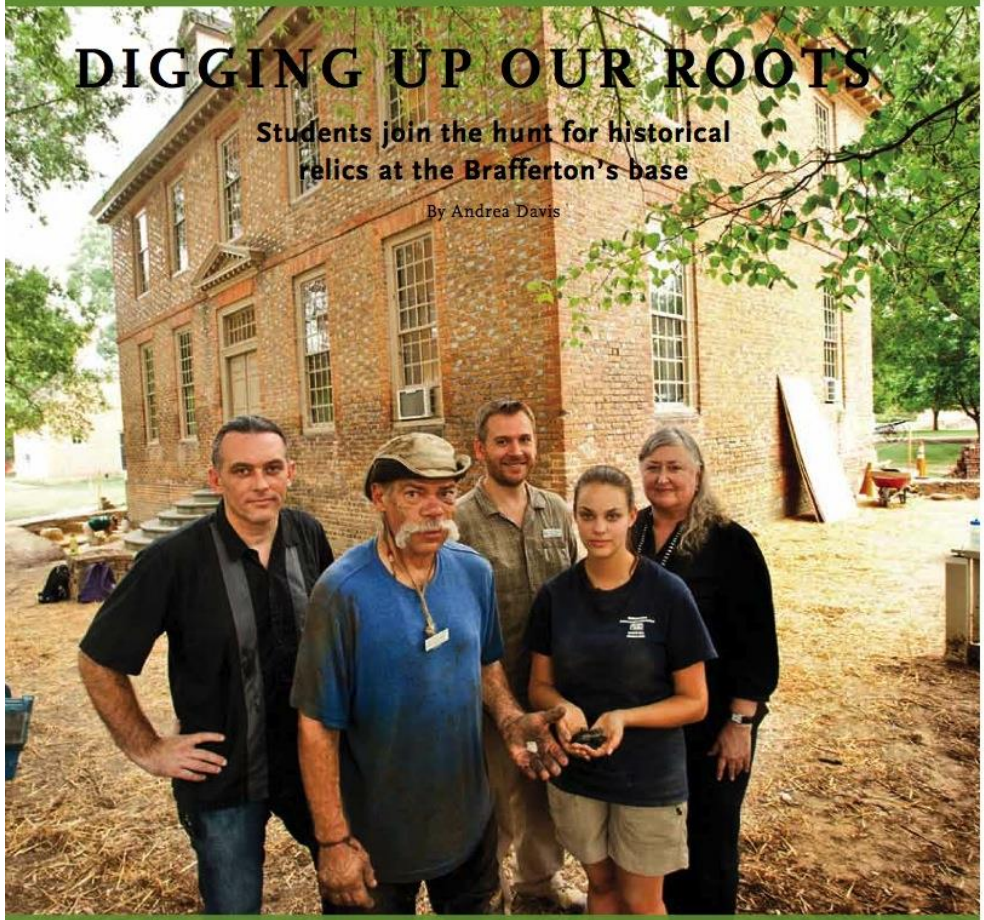
This summer, students at the College of William and Mary participated in a field school focused on the Brafferton. Today, the building serves as the central administration office, home offices of the President and Provost, and a crucial part of the historic campus. In the 18th century, it was the Indian school. Under the direction of Mark Kostro, Ph.D. student at the College and staff archaeologist at Colonial Williamsburg, field school students excavated the two-meter area around the building. Meanwhile, the field school taught students how and why they dug up that particular area.

ARCHAEOLOGY FIELD SCHOOL

DIGGING UP OUR ROOTS

Students join the hunt for historical relics at the Brafferton's base

By Andrea Davis



A PIECE OF STONE AND A SCANT DOUBLE-HANDFUL OF BROKEN GLASS.

It doesn't look like much to the uninitiated, but the team of archaeologists working this summer at the base of the Brafferton knows that these artifacts are the richest kind of pay dirt. The stone is quartzite, flaked on two faces to make what might have been a scraping tool or a projectile point. The pieces of glass have been knapped—made into cutting or scraping implements by working their edges into sharp serrated cutting surfaces.

The quartzite and the knapped glass are the only artifacts found so far with unambiguous connections to students of William & Mary's Indian School, which operated out of the Brafferton from 1723 to its closure during the Revolutionary War. Today, the Brafferton serves as William & Mary's central administration building, housing the offices of the president and provost.

The Brafferton is scheduled to undergo a $4.5 million renovation, a project that prompted the archaeological examination of the site before construction work begins.

The archaeology is partially funded by philanthropic support of the Brafferton renovation project, in particular a grant from the Lettie Pate Evans Foundation.

For much of the summer of 2011, William & Mary students in two field schools worked alongside graduate students in anthropology and professional archaeologists. The field schools were a collaborative effort between the College's Department of Anthropology and the Colonial Williamsburg Foundation. Under the direction of Mark Kostro, a William & Mary Ph.D. student in anthropology and a staff archaeologist at Colonial Williamsburg, field school students excavated a two-meter wide trench around the building. When they weren't digging, sifting or processing artifacts, the students attended classes to give context to their field work.

The Brafferton remains an important part of William & Mary's Historic Campus and also occupies a singular place in the history and traditions of many American Indians. Danielle Moretti-Langholtz, director of the College's American Indian Resource Center, gets regular calls from people who have connections to some of the 50 tribes linked to the Indian School who want to chase down a link to an ancestor who might have been an alumnus of the Indian School nearly three centuries ago.

To reforge the Brafferton's connection with the first Americans, Moretti-Langholtz and Ph.D. student Buck Woodard put together the Brafferton Legacy Group, a panel of William & Mary alumni with connections to the tribes linked with the Indian School. Members of the BLG are Paige Archer '78 (Meherrin), Reginald Stewart '86 (Chickahominy), Ashley Atkins '09 (Pamunkey) and Annette Saunooke Clapsaddle '05 (Eastern Band of Cherokee). The Legacy Group joined William & Mary President Taylor Reveley in a traditional tobacco-bundle ceremony in April.

The Legacy Group was set up as an advisory body to the anthropology department, and members remained active in the excavation throughout the field schools. Atkins is now a grad student in anthropology and participated in the dig. Archer visited the excavation several times, often bringing treats for the archaeologists. She served as an impromptu interpreter, too, talking about the excavation with the curious Williamsburg tourists peering over the brick wall along Jamestown Road.

Facing page: Pamunkey tribal members Jeff Brown and Ashley Atkins cradle Native American artifacts recovered from the base of the Brafferton. Behind them are (from left) Buck Woodard, Mark Kostro and Danielle Moretti-Langholtz.

AT THE BRAFFERTON'S BASE

The field schools excavated around the perimeter of the Brafferton, concentrating within the area to be affected by the pending renovation. The first findings were related to plantings around the foundation of the Brafferton since the Civil War. As the excavations progressed, an assortment of artifacts came to light, representing the 288 years of the Brafferton's existence. Artifacts included fragments of 18th- and 19th-century pottery, glass and tobacco pipes, along with architectural debris such as nails and window glass. The students in the first session of the field school even found a human torso: a fragment of a porcelain doll that bore a "Germany" imprint.

One intriguing find was a stone finial bearing classical details. Edward Chappell, Roberts Director of Architectural and Archaeological Research at Colonial Williamsburg, said that the finial resembles 18th-century ornaments that were used on elaborate gateways. The artifact is probably a remnant of a pre-1776 fence that enclosed the Wren yard, he said.

Chappell speculated that the stone finial recovered from the Brafferton excavation is a relic of Revolutionary-era destruction in Williamsburg, a time of military occupation, during which the formal landscape of the College was disrupted and the President's House accidentally burned.

The students also uncovered the underground elements of an early wrought-iron lightning conductor. Chappell noted that it appears similar to the devices that were installed at Bruton Parish Church, the 1770 Courthouse and the Public Hospital in Williamsburg.

The archaeologists uncovered a set of post holes, extending eastward from the northeast corner of the Brafferton. Kostro points out that the holes correspond with a fence shown on the 1782 "Frenchman's Map," a sketch of Williamsburg that's part of the holdings of Swem Library's Special Collections Research Center. Many of the most important artifacts, including the finial and the quartzite piece, were found in postholes, he added.

Other artifacts render associations that are less Euro-centric. Early in the first field school, archaeologists uncovered two glass beads and an item known as a "jingling cone" or "tinkling cone."

"They're related to adornment," Kostro said, "They're known from both African American as well as Native American contexts." The two blue glass beads are around three millimeters in diameter—Kostro says they're likely Venetian or Dutch in origin. The cone is a thumbnail-sized, thin, triangular piece of trade copper folded to form a cone-shaped object—not a common archaeological find in Virginia, he added.

The beads and copper cone could have been associated with students of the Indian

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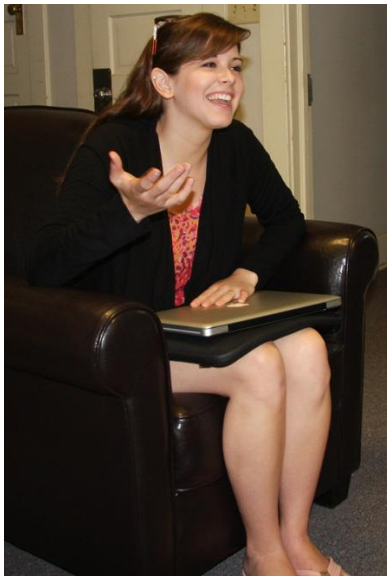
Photos by Stephen Salpukas

Field school participant Thomas Geddy Cross '12 takes a turn at the sifter.

Some common issues

Strange and unsuitable infatuations



Justine Whelan, second-year intern

Justine's lede:

Boarding a plane to spend a week in a foreign archive has a certain effect on someone. The research group that travelled to Pamplona might as well be their own family now as they talk and laugh about their experience together.

Ideation
Science & Technology
Arts & Humanities

Spring 2011
Fall 2010
Spring 2010
Fall 2009
Spring 2009
Winter 2008 - 09
Spring 2008
Fall 2007

Editor
Joseph M. McClain
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Spanish court

Domestic violence. Drug smuggling. Priests hauled into court for scandalous behavior. Welcome to Spain in the 17th century.

Historian Lu Ann Homza took five students to Pamplona, Spain over spring break to study handwritten manuscripts of court cases from the 1600s that dealt with such matters. These William & Mary students had one week to sift through documented court records written in an archaic form of Spanish, as well as in handwriting that at times was nearly impossible to read.

400-year-old court records strike familiar themes

By Justine Whelan '14 | May 8, 2013

Domestic violence. Drug smuggling. Priests hauled into court for scandalous behavior. Welcome to Spain in the 17th century.

Historian Lu Ann Homza took five students to Pamplona, Spain over spring break to study handwritten manuscripts of court cases from the 1600s that dealt with such matters. These William & Mary students had one week to sift through documented court records written in an archaic form of Spanish, as well as in handwriting that at times was nearly impossible to read.

The five—Sagra Alvarado '15, Jessie Dzura '13, Crosby Enright '14, Tracey Johnson '14 and Jack Middough '15—had come to Pamplona prepared. They spent the fall semester in a specialized class with Homza, learning how to decode the 400-year-old Spanish they would have to deal with in the Pamplona archives.

Some common issues

Attribution!

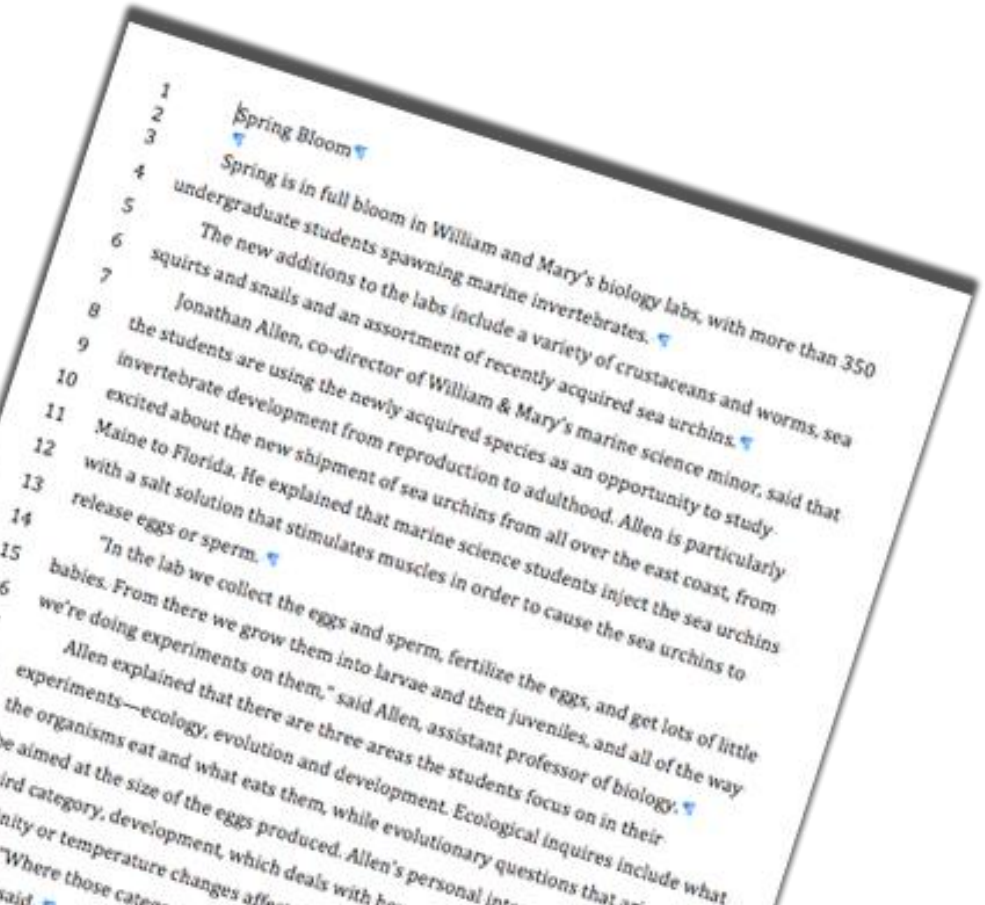
Verbs.

Tenses of verbs.

Where to hang attribution in direct quotes.

To attribute or not to attribute?

Improving their work



Spring Bloom

Spring is in full bloom in William and Mary's biology labs, with more than 350 undergraduate students spawning marine invertebrates.

The new additions to the labs include a variety of crustaceans and worms, sea squirts and snails and an assortment of recently acquired sea urchins.

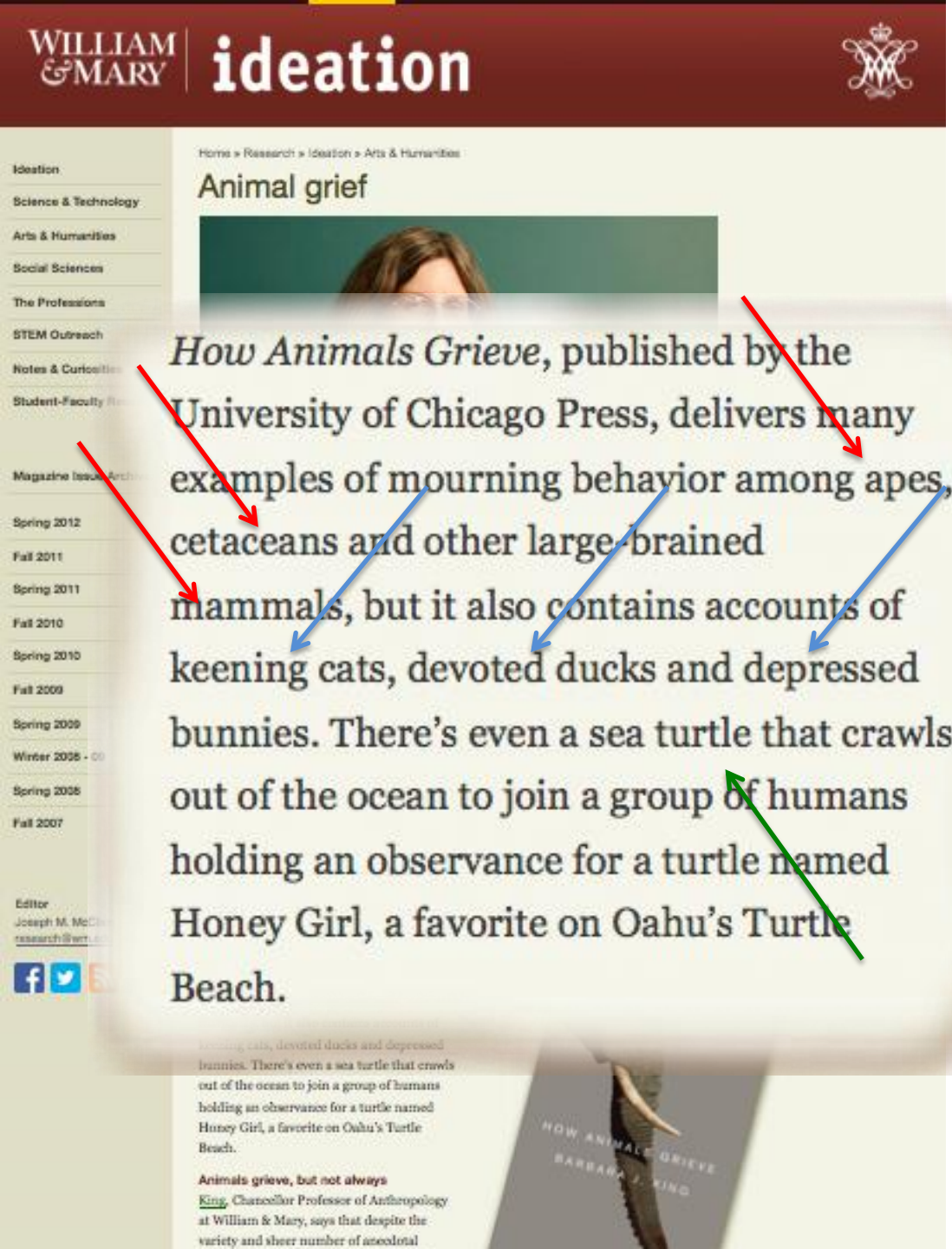
Jonathan Allen, co-director of William & Mary's marine science minor, said that the students are using the newly acquired species as an opportunity to study invertebrate development from reproduction to adulthood. Allen is particularly excited about the new shipment of sea urchins from all over the east coast, from Maine to Florida. He explained that marine science students inject the sea urchins with a salt solution that stimulates muscles in order to cause the sea urchins to release eggs or sperm.

"In the lab we collect the eggs and sperm, fertilize the eggs, and get lots of little babies. From there we grow them into larvae and then juveniles, and all of the way we're doing experiments on them," said Allen, assistant professor of biology.

Allen explained that there are three areas the students focus on in their experiments—ecology, evolution and development. Ecological inquires include what the organisms eat and what eats them, while evolutionary questions that
be aimed at the size of the eggs produced. Allen's personal in
ird category, development, which deals with
nity or temperature changes affe
"Where those cate
said.

The comfy chairs

Alla, a math and government major, joined me as a freshman.



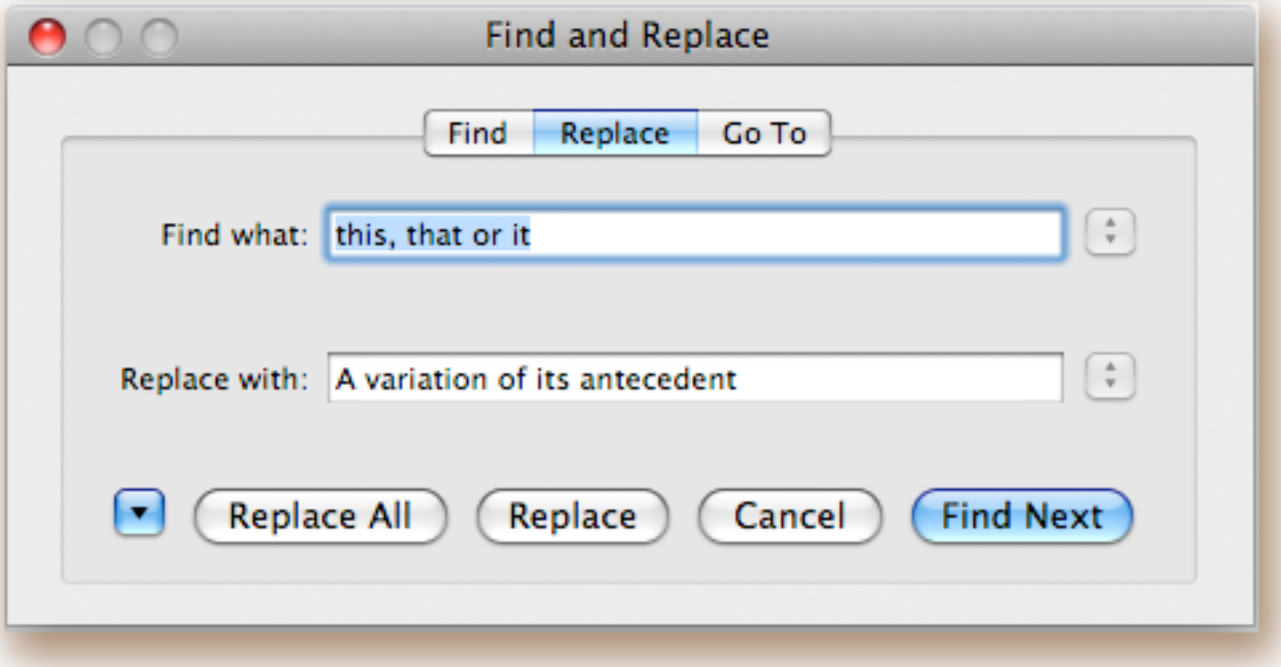
Improving their work

Show them some of your own writer's tricks

The embroidered series

Improving their work

Play a few rounds of
Search & Destroy the Pronoun



Improving their work

Transitions

Original: "Sometimes the cases are so enormous you get into them and you get lost, you're not sure what you're reading by whom" says Homza. "It's not as if there are little subsections with sticky notes telling you what comes next."

Homza and her students also caught up with retired archivist, mentor, and friend Don Jose Luis Sales Tirapiu before departing Spain. Tirapiu is credited with building the Archivo Diocesano de Pamplona to be what it is today.

Revised: "Sometimes the cases are so enormous you get into them and you get lost, you're not sure what you're reading by whom" says Homza. "It's not as if there are little subsections with sticky notes telling you what comes next."

Students may not have sticky notes, but they do have the help and support of the archivists who are able to lend a helping hand or even just a word of encouragement. That's why Homza and her students made it a point to catch up with …

Goals

1. Make them comfortable in their own writer's skins
   - Increased confidence
   - Increased competence
   - Begin to write deliberately
2. Have them understand the vicissitudes of the craft
   - Almost never a single "right way"
   - It seems formulaic, but each piece is different
   - The requirements of different writing idioms
3. Produce some good stories!

Thanks! Hope this has been helpful.

Joe McClain
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www.wm.edu/research/ideation