Science and Values:

**Wednesday, October 24 & Thursday, October 25**
8 p.m., Brackett Auditorium & 2 p.m., Brooks Center Auditorium
“The Road to Mama Day”
Gloria Naylor, Author

**Tuesday, October 30**
4:30 p.m., Student Senate Chambers
Science and Spirituality - Panel Discussion
Prof. Jeffrey Clayhold, Department of Physics and Astronomy, Clemson University
Prof. Roger Doost, School of Accountancy and Legal Studies, Clemson University
Prof. Nancy Hardesty, Department of Philosophy and Religion, Clemson
Rev. Cynthia Prescott, Unitarian Universalist Fellowship, Clemson, SC
Moderator: Prof. Michael Coggeshall, Department of Sociology, Clemson University

**Thursday, November 8**
8 p.m., Brooks Center Auditorium
“Defending Human Cloning: A Rough Road Ahead”
Gregory Pence, Medical Ethicist

**Wednesday, March 13**
4 p.m., Self Auditorium, Strom Thurmond Institute
From Classroom to Battlefield: The Effect of War on the College Campus - Panel Discussion
Prof. Alan Grubb, Department of History, Clemson University
Bill Hunter, M.D., Class of 1948, Distinguished Alumnus of Clemson University and the Medical University of South Carolina
Prof. Bill Koon, Department of English, Clemson University
Moderator: Prof. Skip Eisiminger, Department of English, Clemson University

**Thursday, April 11**
8 p.m., Madren Center
“Colored Bodies: Henrietta Lacks and the HeLa Cells”
Charlene Gilbert, Filmmaker
Dr. Julia Frugoli, Department of Genetics and Biochemistry, Clemson University
Dr. Barbara Holder, Department of Nursing, Clemson University
Dr. Kelly Smith, Department of Philosophy and Religion, Clemson University

**New Frontiers, Perennial Questions**

All events are open to the public free of charge. Call 864.656.3040 or 864.656.5379 for details.
This magazine is produced for the friends of the university to celebrate the second Presidential Colloquium, which took place at various times during academic year 2001-2002, entitled

**Science and Values: New Frontiers, Perennial Questions**

The full-text version of the proceedings, with illustrations and associated features, will be published on our website (see www.clemson.edu/caah/cedp/pres_coll/index.htm), edited by Donna Haisty Winchell, Daniel E. Wueste, and Wayne K. Chapman, designed by Kimberley Grissop, Kaushal Seshadri, and Manika Gandhi, the editorial assistants who also developed layout and illustrations for this booklet.

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From the Colloquium Coordinators:

The Presidential Colloquium began as President Barker’s attempt to unify faculty and students in the study and discussion of a major theme of interest to the campus community. The first year’s theme, *The Idea of a University*, led students in large numbers to consider everything from the history of the university as an institution and the history of Clemson University in particular to the effects of the computerization and corporatization of the university.

The theme for academic year 2001-02 was **Science and Values: New Frontiers, Perennial Questions**. Once again, hundreds of students working in dozens of different classes unified around this thematic focus to read, write, attend lectures, and discuss pressing issues. Some entered their writing in essay and poetry competitions, as reported herein. Speakers came to campus to speak to our students about the various ways that the scientific and the spiritual intersect.

September 11, 2001, brought a new kind of unity for our nation and our campus. As our students and our country felt a vulnerability never before experienced, at least in the lifetime of this generation’s college students, we decided to shift the focus of our readings and discussions to the role that ethics and fundamental values play in time of war. As we and our students were tempted to look with suspicion at faces unlike our own, we read and heard about the history of stereotyping in time of war and the history of war’s effects on the Clemson campus. We gave the Colloquium a different theme for the spring: **The Brave New World in Time of War**.

We are pleased to present here excerpts by the speakers and panelists who were a part of our Colloquium in Fall 2001 and Spring 2002. We also present with pride the student winners of our essay and poetry competitions.

Donna Winchell and Daniel Wueste
[Now] as the novel proceeded, it made sense to me that the story should be told in the collective voice of the island, then Coco’s voice, then George’s voice, and back to the collective voice of the island because the novel was about love and magic and there is nothing more subjective than that. One point of view would not have sufficed because with just one point of view, it meant that I, the author, was also taking a position and nine times out of ten when the author takes a position, the reader will take either that position or one diametrically different from it because a statement has been made. And I didn’t want to do that with Mama Day. I wanted to very gently coax my readers into a journey through the spectacular and to have a journey that ended in the spectacular.

So, what happens is from the first 15 pages, you are introduced to a world of magic that is the imagination. And the narrator says to you, “You know what? Ain’t nobody really talking to you. We’re sittin’ here in Willow Springs and you’re God Knows where. It’s August 1999 and it ain’t but a slim chance it is the same time where you are. Right?”

...you meet Coco and George and there you have two of the most incongruous persons finally getting together. And regardless of who you are out there in that audience, whatever circles you might move in, there has been some couple within your circle of acquaintances when you have at some time, turned to someone you know and said, “My God, what does she see in him?” And yet those people are going along quite well with their lives and making it happen. That’s another form of chemistry, a form of magic that is somewhat universal. And so far you’re seduced into believing that and ultimately you meet Mama Day and the kind of magic that she purports; that of being able to teach people and to reach down within themselves and pull out the potential to create miracles. That is perhaps the most resistant of all the magic shown in this novel.
...what I wanted to do was to indicate that there is nothing objective in this world; like Mama Day tells George about the chicken coop; there’s an inside and an outside, there’s a rightside and a leftside, there’s a back and there’s a front and all of it depends on where you are standing and so this book about love and marriage was structurally created that way.

The question I get sometimes about who is my favorite character. And I will give the pat answer that, just like having children there is no favorite child. Each child brings you something. But having said that, what I have always admired in my work were the feisty older women. Like in the Women of Browser Place it was a character called Etta May Johnson. She was in her fifties going into her sixties and she put on a tight red dress and went to church hoping to entice the preacher. So if God is good and it works out, I would love to grow old like Mama Day. She never lost her love of life, she never lost her sense of curiosity, she never lost — even with all the darkness she saw — her belief in the human spirit. So regardless of how aged I might be and the world when you take two steps back can make you extremely cynical and the older you get, the more you see to be cynical about, but all of that being said, I hope to go out like Mama Day. I really do.

Coco kind of sprang up in her own right, I didn’t have a model for her. I think there is a little bit of me in Coco, in her feistiness, to that degree, and in her bravery. Because when she got sick, she didn’t panic even though she knew she was dying. She still tried to take care of George and to keep him from harm. I didn’t have a role model for Coco. For George, he was a conflation of several men that I knew—my cousin’s husband, a nephew I had.

So that’s the spirit that I had wanted to convey with Mama Day. Women who could not define the word feminism for you—often women who could not even spell that word. But who knew what it was like to struggle and to try to live your life with dignity. And those are the spirits of the women who stand behind me. Not all of them black, not all of them related to me, not all of them who may even know who I was or who would care.
Defending Human Cloning

Despite Michael Keaton in *Multiplicity*, you can’t clone yourself. You can’t clone memories. To make a little bit of a distinction there is a difference between a genotype and a phenotype—what nature contributes vs. what nurture does. Even if we recreate the genotype, we don’t get anything like the same kind of person.

Recently, the number of twins has been increasing, even before assisted reproduction. Now we even have identical triplets. Once you get over the yuck factor, and there is a yuck factor, and you ask these guys, “Are you glad you exist?” they say, “Sure.” And you say, “What’s it like having two identical copies of yourself?” and they say, “It’s not copies of me, it’s copies of my genes, but it’s kind of like having two really good friends for life.” And you ask their girlfriends, “What are they like? Are they interchangeable?” And the girls say, “Oh no! I would never date the other two. They’re really weird.” So significant others have been able to see real differences between them and they’re certainly persons.

I’m not saying there aren’t problems with abnormalities, I’m saying that every ethical issue had a cultural pedigree and you have to pay attention to the context to understand where our feelings come from and kind of step back and analyze those feelings with the little bit of rationality and evidence that we all have, and not be completely swept away by what we have been conditioned to believe. There are many books out there and every time there is a new advance in assisted reproduction people use titles that are very sensationalistic. Why should a new way of creating a family be an assault on parenthood?

It is not Ian Wilmut, but a guy named Steve Wilitson who is really the genius behind human cloning. When Steve was in college, he wasn’t just learning biology and the laws of nature; he was figuring out ways to falsify the laws of nature in the textbooks. Now there’s a smart guy! And he is the one who really did the basic work that led to what Wilmut did and in some ways Wilmut was more the technician.
You think about all the movies like *Jurassic Park* where even the scientist is benevolent, but it still goes wrong. *Boys from Brazil. Alien Resurrection. Blade Runner* is kind of a cloning movie, its replicants—they aren’t supposed to be human, but they really are. They really do have souls. All of this is a very powerful context that is amazingly influential in how we think about cloning.

The other night, I was at a bar and I saw some pregnant women smoking and drinking, a very common thing. We know the terrible harms that occur when a woman smokes three packs a day. We know that the instances of cleft palate really jump. We know about maternal fetal alcohol syndrome. We just seem to accept these things as normal, but they are definite harms that we know people are doing, but no one would think about criminalizing that behavior, arresting a woman and putting her in jail, but people are talking about criminalizing cloning. Let me tell you that one hundred times more babies will be harmed by smoking and drinking than will ever be harmed by cloning, and no one is really talking about criminalizing smoking and drinking because that is real. That’s personal.

All of the critics, people like Leon Kass and George Anderson are careful to call it replication. They know that if you call it reproduction it’s protected under Roe vs. Wade and Planned Parenthood vs. Casey, and numbers of decisions that have basically said that decisions about how to create children is one of the most basic rights that Americans have. They want to make sure they classify cloning not as reproduction but as replication. This is spin control through semantics. Hopefully, we will learn that lesson.
I have, alas, studied philosophy
Jurisprudence and medicine, too,
And, worst of all, theology.
With keen endeavor, through and through –
And here I am, for all my lore,
The wretched fool I was before.
Called Master of Arts, and Doctor to boot,
For ten years almost I confute
And up and down, wherever it goes,
I drag my students by the nose –
And see that for all our science and art
We can know nothing.

Goethe

Science dealt with matter and religion dealt with non-matter or spiritual matters. But the very matter that initially was thought to be lifeless did indeed have a life; i.e., the stone, the earth, the plant, the animal, the human body, and of course, the human mind. So in its broader sense science became a spiritual pursuit. … I see science as a spiritual pursuit without introducing religious dogmas into it. We must continue the spiritual path of science through a continued sense of humility and awe for what we don’t know and a persistent and unfettered search for truth for generations to come.

This is primarily a reminder to myself because I do not enjoy a consistent feeling of spirituality when I teach accounting but those of you who are engaged in literature, philosophy, architecture, medicine, psychology, ceramics, music, dance, theatre, and agriculture seem to be more engaged in the spiritual aspect of science.

Spirituality to me also provides a vehicle for love, harmony, understanding, and a sense of oneness with the universe. A spiritual practice of science, it seems to me, can provide more complete healing for the patient if you are a doctor or a nurse; a more wholesome and appealing architecture if you are an architect; and a more inspiring music or theatre or poetry if you are an artist.
One of the first books I was required to read as a college freshman, in a course called "Christian Thought," was Your God Is Too Small by J. B. Phillips, a British Bible scholar. I don't remember much of the content, but the title has stayed with me.

At college I signed up for geology to fulfill my science requirement. From Dr. Donald Boardman I soon learned that continental drift, the law of uniformity, the layer upon layer of rock on the earth's surface all indicated that the earth was far older. I began to see that my God was too small.

I have been intrigued by certain other scientific issues and findings. One is the age and vastness of the universe — 4.5 billion years old for our earth. The other is the age and development of the human species on this planet, stretching back over the past 5 million years. These vast reaches of time raise many questions for me as a religious person. And as a Christian, one whose religion is a mere 2,000 years old, I must ask the question, “Why did God wait so long to reveal this truth?” Is my God too small?

This past summer I read Bishop John Shelby Spong’s book, Why Christianity Must Change or Die. I found it rather challenging. One of his points is that despite the scientific knowledge we all learn in high school and college, when it comes to the Christian faith, many of us are still operating in a three-story universe: God is sitting right “up there” in the clouds, we are sitting here on a flat earth and the devil is sitting “down there” in hell.

Another alternative or a complementary notion is to define God in terms of dynamic energy, the basis of the energy of all that is. Some physicists are talking about God as consciousness within the universe. If our thinking about God is too small, are we expanding our own ideas through reading and study? Are we helping our people to expand their thoughts?
“Science is my shepherd, I shall not want...” That is how the twenty-third psalm begins after a rewording by the Reverend Fosdick, who was trying to ridicule the limits of science and highlight what he perceived as its spiritual shortcomings. My personal sense of spirituality is different and broader than that - it includes science. Spirituality encompasses so many essential aspects of the human experience. It includes our sense of wonder at the world around us and the desire to understand it. Spirituality guides our notions of the individual and our relations to the broader community of people and nature, and it guides our notions of God. Spirituality and science are just destined to meet and play off each other in countless interesting ways.

As spiritual as the study of science can be, there are obviously many other sources of spirituality. Compared with these other sources, science does have its limits. It only probes some very reduced part of our reality, a part we can understand in near totality, like the atom. Atoms are understood so well, we know exactly how they will behave under so many different conditions, sometimes with a shocking precision of one part in a billion. Of course, there is a lot more to know about human existence on this Earth than just the behavior of atoms. Science tells us a lot about a little.

Certain good, traditionally religious, friends of mine, the ones to whom I have failed to articulate this broader view of spirituality, have asked if I view science somehow as a replacement for religion. I absolutely do not. Science and traditional religion do different things for different people. Even religion is no replacement for religion: Buddhism and Orthodox Judaism serve very different peoples in very different ways. A variety of paths to spiritual growth is not only possible, but essential to the health of our community.

Humans are spiritual. Many human activities are spiritual. Baking bread can be spiritual. For me, spirituality is an attitude, an openness towards life, community, and the world. Making new science is intensely spiritual.
I feel fortunate to have grown up in a faith tradition, Unitarian Universalism, that affirms religion and science as mutually worthy sources of spiritual wisdom. Since I attended Sunday school during a particular era of American religious and cultural history, the sixties, there was a downside to my good fortune, which I’ll get to, but in general I am grateful. We studied the Bible, and we studied evolution. Ours was a spiritually seamless cosmos.

As a minister, I am asked often to define “spirituality.” Occasionally the person who asks me is looking for a debate, but usually he or she wants only to hear what I think. For years I’ve given one, simple response, at least for starters. Spirituality is what makes you come alive, what animates your existence. The word “spirit” comes from the Latin spirare, to breathe. Think inspiration, aspiration, and, if you’re an athlete, perspiration. Another definition which I like is from the late Rev. Jacob Trapp, who said that spirituality is “where the window of the moment open[s] to the sky of the eternal.” In other words, spirituality is all about discovering where, how and (if possible) why we are related as humans to the great process of life and/or the entity named God, knowing that relationship consciously, and being awed by it. This can happen through religion or science, prayer or equations, and at all points in between, if one believes in a seamless cosmos, as most of us do to some extent.

In the early 1900s, Unitarian minister John Dietrich developed a widely-embraced religious philosophy which came to be called humanism. The premise of religious humanism is that human knowledge is the truest measure of existence in the here-and-now, human beings have enormous instinctive potential for doing good, and they are therefore the best hope for the future of our species and those that depend on us...

Humanism is great, but it doesn’t go far enough (as John Dietrich admitted toward the end of his life). There is a whole zone of human experience which cannot be discussed, let alone measured, through scientific methods. There will always be another knotty mystery popping up to replace the ones we solve.
The Communication-Across-the-Curriculum program at Clemson University, coordinated by the Robert S. Campbell Chair in Technical Communication and supported by the R. Roy and Marnie Pearce Center for Professional Communication, conducted a “Poetry Across the Curriculum” project, Fall semester, 2001. Co-directed by Art Young, the Campbell Chair; Patti Connor-Greene, Distinguished Alumni Professor of Psychology; and Catherine Paul, Assistant Professor of English, the project involved seventeen teachers and an estimated five hundred students. As part of this project, students wrote poetry as a part of learning the subject matter of a particular discipline.

Six poems for courses in the disciplines and three poems from English Composition 101 were selected for special recognition. The authors of these poems were awarded a Certificate of Achievement, and the poems are published in the following pages.

Jack Berno
Schizo

It’s a panic
To feel like
You’re on a hallucigenic
24-7
doctor diagnosis is schizophrenic
with a hint of manic
depressive
I’m a maniac
Doesn’t take a braniac
To realize that it hits you
With no planned attack
Missin’ deliveries
To me like a baseball player
With a fanned at bat
Sucks to be psychotic
Only friend
Is your narcotics
Far from exotic
Or erotic
My body’s normal

When it’s always toxic
The disease
People mock it
Suicidal thoughts
I try to block it
Give me a gun
I’d cock it
Maybe the voices in my head
Just talk it
Insaneness is movin’ in
Actin’ like a hooligan
My man down the hall
Just ate his poo again
See my family
I’m like
Who’s this man?
Beatin’ the wall
Threw fists and
I’m blue again

Want my mental
Bright as the light
In the sky
On the 4th of July
Boomin’ in
Celebration
I want to reason
Went to high school grad
Makin’ A’s and B’s in
To a mental house
People lookin’ at me
Always teasin’
Life is cold, far from pleasin’
I’m always freezin’
Just want to settle
In a sunny meadow
Clear sky
Flowers bloomin’ in
The season
Hello, nice to meet you. My name is . . .
Okay, pretend you mean what you say.
Thank you for taking your time to meet
with me . . .
You like my suit
I wore it just to impress you
I even shaved and showered
You’re not seeing me though
I have six earrings
I wear flops with duct tape on them
I wear my pajamas to class
I wear jeans for a month before washing
them
I hardly know how to tie a tie
Well, my strengths are that I am a hard
worker and . . .
I’m sure you haven’t heard that a million
times
Do you want to hear I get drunk 4 nights a
week
I’m adept at stealing street signs
I’m incredibly sarcastic and cynical
I laugh at people when they fail
Well, a weakness is sometimes I try too
hard and . . .
Give me a break, that’s not even close to a
weakness.
How about I’m lazy
I detest working in groups,
I save things till the last minute,
I ignore things to make them go away,
I am easily angered,
I steal office supplies.
I do just the bare minimum.
Well, I want to work for your company
because of the good reputation and...
No, I want to work here because I could
get away with so much
Actually, I don’t
I would rather not work at all
I think your company makes inferior
products
I think a factory full of monkeys could do
better
Well, you should hire me because . . .
I gave you all the answers you wanted to
hear
I said please and thank you
I shook your hand, firmly
I wore a wrinkle free new suit
I smiled and kept eye contact
I have a well-written resume, on pretty
paper
Truth is, I hated every minute of this
interview.
I hated pretending to be someone I’m not
just to get a job.
You think you know me, but you have no
idea.
I did and said everything you wanted
You don’t know me at all
Sure, I can start on Monday . . .
Daddy gathered all his boys round
That big oak table on the back porch,
That big oak table that he and Grandpa built
Thirty years ago.
Daddy gathered all his boys round
For the Sunday meal,
The one time they could all get together before
He had to head out to the fields
To toil and sweat over tough crops and black soil.
Daddy gathered all his boys around
And told them his secrets.
He pumped them full of cornbread biscuits,
Barbequed chicken, and sweet tea, and
He whispered to them about things only they could understand.
Daddy gathered all his boys around
Knowing that one would go out
And tell his secret.
Maybe he’d tell it to that girl,
That little girl with the skinny legs and round behind
That made all the boys drop their chin when she sauntered by.
Or maybe he’d tell it to the preacher man,
The one with the bellowing voice
That made the pews rattle on Sunday mornings,
That mighty preacher man that held the whole congregation in his grasp.
Daddy gathered all his boys around
And fed them all his love and all his soul and all his being,
And he knew that one of his boys would tell his secret
And he knew that things would never be the same
And he knew that he would never stop loving,
That he could never stop loving
Every one of those boys of his.
Watch her rush down the staircase.
No, she pauses. She stops, she isn’t walking.
Is she talking?
No, she can’t cant—she has no time.
She must continue her descent.
So much ado over today!
Everyone is awaiting her presence.
The debutante enters her ball.
Startling, she’s naked.
Did all the preparation pass in vain?
No, for I see she is aware of her new state.
She appears to have recently shaved her legs.

She goes to play in the yard
frolicking, screaming, laughing
rushing, losing, teasing
“You run like a girl!”
teasing, crying, leaving
She leaves to go to her new school
asking, answering, learning
“Books out. Math time. Let’s begin.”
reading, figuring, solving
“I’m sure all the boys are done”
insulting, confusing, remembering
She goes to begin her new job
exciting, fearing, awaiting
“Type this. Coffee please. File these.”
shrinking, unnerving, questioning
“This type of work is women’s work”
infuriating, degrading, debilitating
She looks back to her childhood
smiling, crying, understanding
“I’m a woman. I have gifts. I am worthy.”
asserting, believing, embracing
“I can be anything I want to be.”
arguing, contradicting, overcoming

Seek not what is sought
by your enemy’s eyes
teach not what is taught
by their lonely hearts in disguise
fuel not their flame
for brighter it will burn
Able not their Cain
for in History, the Pages turn
loving the loveless
is Mercy in its finest
helping the helpless
is exhibited by the kindest
Pray for your enemies
no matter the pride that’s at stake
Love for your enemies
these measures will make

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frolicking, screaming, laughing
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“I’m a woman. I have gifts. I am worthy.”
asserting, believing, embracing
“I can be anything I want to be.”
arguing, contradicting, overcoming
Never knowing the sweet air of acceptance
Never breathing that same air
Scared is my face that gazes at the Earth
Tired are my bones that walk it
Swimming in the clouds during the night
Oh I long for the nights
The nights that bring forth my dreams
The days that are drowned in chains and alcohol
I have nothing on this Earth to keep me here
I am a servant to the man that has stolen from me
I am a pitiful worthless man that should have land
Instead I hold a bottle near my stickly lips
I search the bottom of bottles for an answer
The answers never come
Oh I long for the nights
The nights where my dreams are realized
Everyday I am a slave to the Earth and the magic that controls it
I know no release
I know not love
I have no concept of acceptance
I’m a servant that only inhales the air near the sole of a shoe
I walk below the dirt, below everyone else
I know loneliness and the bottle
I know the peach colored clouds of happiness
I just don’t know the feeling of floating on those clouds.
Pop, crack, squish was all that I heard,
As I pushed on their backs; it sounds so absurd.
The ants kept marching, one after the other,
And then I killed his sister, his cousin, and his brother.

I thought nothing of it as I smashed them one at a time,
And even though it was murder, I was committing no crime.
I did not worry as I crushed them with a bash,
And wiped their broken bodies into the trash.

I worked without effort each time I pushed down,
I didn't kill a family; I killed a whole town.
But still they kept marching like soldiers in line,
As I sat outside, eating and drinking my wine.

But soon I was saddened by this thought in my head:
No one would care that they were all dead.
I was a giant, and they were so small in size,
That I couldn't feel their pain or even hear their cries.

It's amazing to kill without thinking twice,
And have our fate decided with the roll of a dice.
Nature's beauty is questionable; that's what I meant,
And life as we know can be insignificant.

Warmly I settle into the creaky sofa,
on family movie night.
Falling into the rhythm of the ceiling fan
I am Oblivious to the bitter popcorn salt
chapping my lips
My brother
resting limply against my shoulder
slowly Nods off.
While Mom’s soft fingers,
Are traced and retraced through my hair,
Even after the movie is over,
And the screen has long since been filled with snow.
In that moment, The world extends only to the edges of my vision
No worries or cares.
I am home.
In 1951, Henrietta Lacks was thirty-one years old and a mother of five. At Johns Hopkins University Hospital, where she had been admitted because of vaginal bleeding, a physician removed some suspicious cells from her cervix. Laboratory analysis revealed the problem: Henrietta was diagnosed with cervical cancer. Six months later she was dead. Henrietta’s cells—HeLa cells—turned out to be very special. Researchers found that they thrived outside of her body, multiplied and were easily kept alive in cell cultures. They constitute one of the first so-called “immortal” cell lines. HeLa cells, which were used in the development of the polio vaccine, are used in laboratories around the world. Distribution of these cells has become a billion dollar industry. One unsettling aspect of the history of HeLa cells is that neither Henrietta nor her family gave permission for the use of her cells in research. Further, the family did not learn of their widespread use until 1970.

…So, my interest in this story is multifaceted: I am drawn to the scientific and myth-like qualities of the “medical” case of Henrietta Lacks and the Hela cells, I am interested in the ethical or not so ethical relationship between Henrietta Lacks, her family and Johns Hopkins University as well as the predictive aspects of this story which are apparent in both the material reality of the cells themselves which have a lifespan far beyond my own as well as the ethical questions which may have begun in 1951 with Henrietta’s experience but have continued and indeed been transformed by the rapid developments in biotechnology.

I do not claim to have answers to any of the questions I may pose today and it is not my desire to suggest that my film will answer these questions in any exhaustive or complete way but rather I was moved to explore this subject in the context of bioethics because I was deeply concerned by what I saw as a broad and problematic lack of discussion in the public sphere on the question of bioethics. My hope is that my film will simply contribute to the public discourse on ethics in the context of medical research and new biotechnology.
As a bench scientist myself, I understand that we train scientists to design experiments so that the experiments will prove or disprove a theory. Until recently, we have not trained scientists to design experiments with people any differently than experiments with yeast. Because the best experiment from a scientific standpoint may not be the best experiment from an ethical standpoint, we as a society have demanded scientists consider the ethical responsibilities they have to the subjects of their experiments. The scientists of Henrietta Lacks’s day were not trained to regard these responsibilities as equally or even more important than the science itself. However, since the Belmont Report and the resulting guidelines for human research and medical consent, situations such as Henrietta Lacks’s in the early 1950s have become the exception rather than the rule.

Charlene Gilbert emphasized the issues of permission, profit and public good. Although the research climate has changed since the 1950s, the issues have become broader. It is important not only for scientists but also for the person on the street to be cognizant of these issues. Clemson students who take Introductory Genetics learn about the rules for giving permission to harvest DNA as part of a genetics lab in which they isolate their own DNA. Charlene Gilbert’s talk was particularly timely in South Carolina, a state which has proposed indefinitely retaining blood samples, harvested for public health testing from newborns, in case the DNA might be needed in the future. This proposal emphasizes that Henrietta Lacks’s story is still pertinent to all and should be told.
It’s easy to forget in all the complex argumentation that we owe Ms. Lacks an enormous debt of gratitude. Whatever else you believe about this complex case, this is clearly undeniable as her cells were used in the development of the polio vaccine and many, many other critical biotech advances. Biology would not be where it is today without her contribution. That needs to be said explicitly at the outset, something we often neglect to do.

Another debt we owe Ms. Lacks is showing us how not to go about research. I don’t want to detract from the gravity of the situation, but it is true that we learn from our mistakes. Abuses like the Tuskegee study and HeLa cells show us, sadly only in retrospect, how to improve our treatment of our fellow human beings.

The issue of the use of tissues is becoming even more prominent of late. Partly that is because of the lessons we have learned about how not to collect such tissues from Ms. Lacks’s experiences and partly it’s due to the fact that tissues, in light of the human genome project, now contain such enormous amounts of highly sensitive information about the patient. I can say from first hand experience that human subjects panels take these issues extremely seriously indeed.
The First World War is a particularly important war in terms of involving colleges in public policy. One of the themes that comes out of all World War I literature is the loss of innocence. This is the theme that I believe comes out of almost every memoir of World War I. That is an appropriate place to start with the impact of the war on Clemson College.

The first effect of the outbreak of war in Europe on Clemson College was obviously financial. The first effects of the war on Clemson College didn’t wait until 1917. This college depended for its revenues largely upon something called the fertilizer tax. It had a special right to tax fertilizer because in part it inspected it, and that was an important part of the college’s revenues and it also kept it independent of the legislature, which didn’t look upon the college very well. The outbreak of the war in 1914 meant a decline in agriculture, particularly of cotton, and this meant a decline in the use of fertilizer. So its immediate impact here was certainly economic. It caused revenue problems that were only going to be solved in the 1920s when the College had to do what it had tried not to do: depend on the State Legislature for its financial support. So it did have lasting financial impact. The outbreak of war in 1917 had an immediate impact upon the campus. It militarized it in effect. One of the first impacts was clearly that it lost a lot of students. Many students volunteered. Professors departed and had to be replaced. In this instance, one of the first women faculty was hired as a result of the war—a woman named Rosamund Wilcott who was an architect from Cornell and obviously she would not have been hired before if it had not been for the shortage of men. They actually wanted to hire her brother, but he went someplace else. But it did clearly change the faculty as well as the students.

Twenty-five Clemson men were killed in the war. It also affected the daily life in large part because of the establishment of the Student Army Training Corps (the forerunner of the ROTC) in 1917, which had an immediate impact on the nature of the college. Clemson had a military tradition, a cadet corps, but it was not a military school as such. The establishment of the Student Army Training Corps meant, in effect, that the war department was present on campus.
As a seventeen-year-old freshman, in '41, one Sunday afternoon I was walking down the sidewalk. We were a military college, the official title: Military College. There were about seven in the United States at the time—Texas A&M, The Citadel, Clemson, VMI, VPI, Auburn, Norwhich up in New England. These were strict military schools; we had to be in every night. They blew a bugle and we were supposed to be in our rooms studying. We had to wear uniforms all the time, and that’s how Clemson was prior to WWII.

Now on this Sunday afternoon as I was walking from the main building down about in front of the Y, I saw all these cadets and students out on Bowman Field. It looked like they were having a rally. It was December and I wondered, what in the world? Football season was over, basketball hadn’t started and they were having a rally out there. They had brooms, whoopin’ it up, startin’ a bon fire and hollerin’ something like “Cock-a-doodle-doo, Japanese Empire, to Hell with you!” I thought, what in the world has happened? And I asked somebody, who said, “The Japanese have bombed Pearl Harbor.” The first thing I thought was, where’s Pearl Harbor?

So, there were about 3,300 cadets here at that time. I had always wanted to fly. I had been raised on these WWI airplanes. I knew everything about every one of them. So as soon as WWII started, I really needed to be 18 and to get enough college so that they would let me study flying. That’s what I did. Within a year, I was in the military, and I don’t think 200-300 people were left at Clemson. I went on to have some pretty interesting experiences in the military. Clemson cadets were all over the world. We had an old saying in those days, “A Clemson man needs no introduction,” and you didn’t.

After WWII, we came back and the coach told me, “Bill, we want you back. We want you on that team in ’46.” And I said, “Well coach, I’m not gonna do any more military. I’ve been in four years.” I had been in the Marines. I flew F14 fighter planes off a carrier, and I didn’t want to come back to military school. Well, they decided, at the last moment, that if you had served in the military, you didn’t have to be a cadet, and it was from then on that compulsory military at Clemson ended. After WWII, occasionally a girl might take a class. What a relief that was!
I moved into a young adulthood that coincided almost exactly with the Vietnam era. I graduated from high school in 1960, and I registered for the draft the same week. And then I was off to college.

The draft loomed over us. All young American males were obligated to two years of military service at that time. Some did it straight out of high school; others put it off by going to college before serving. The latter route allowed you to be an officer and perhaps get away with only six months of active duty.

The draft intensified as the war developed through the sixties. The draft boards kept up with us a little more carefully. Going to school gave us deferments, but we had to be decent students. Some bad grades, the wobbly semester that most of us allow ourselves—I think all of us have one of those stashed away—could mean a trip to boot camp and then on to Southeast Asia. Maybe the threat made some of us study a bit more.

It had other effects, too. The draft board would defer those studying for what we called a critical occupation. If the country needed you alive and well at home, you could avoid the military. That clause shaped a lot of lives, and certainly mine. Teachers were considered critical, even English teachers. And suddenly there were a lot of us . . . Since we were not altogether conscienceless, we had to do a lot of work justifying staying out of the military by enjoying college life while some poor bastard who did not have access to school or a critical occupation fought the war for us.

Along the way, we did, as a nation, figure out that the draft was not fair. So we turned to something called the lottery. . . Quite literally, many of my classmates, after watching their birthdays drawn early on that TV show, left the lounge, went up to their dorm rooms, packed up and went home to enjoy the brief moments left before being drafted.

I got to Clemson in 1972, got a real haircut down at Al’s and became the respectable citizen you see before you. I don’t have a lot of regrets; being an artifact is not all bad. It would be easier now had I gone, then.
J.T. Barton, Jr., Ethics Essay Scholarship Competition

The competition, which began in the fall of 2001, provides an opportunity for students to explore an ethical issue and present a reasoned argument in favor of their position on the matter. The focus of this year’s competition was human cloning for the purposes of reproduction—should it be banned in the United States.

The scholarship prizes, totaling $3,000, as well as associated support activities, were made possible by a gift from Clemson alumnus Stephan J. Barton (’72) in honor of his father, J.T. Barton, Jr. (’50), also a Clemson alumnus.

In its inaugural year, we were delighted to receive 132 essays. Especially so, since the essays were written by undergraduates from each of Clemson’s five colleges. A MyCLE site was set up for the competition—“Clone 101-001”—and 169 sections of Clemson courses, again from each of the five colleges, signed up for access to the materials gathered there!

Jessica M. Keaton, a sophomore majoring in English, won the first prize scholarship award of $1,500. Alexander David Nyquist Landfield, a senior majoring in Biological Sciences, won the second prize scholarship award of $1,000. Peter Rogers Stone, a junior majoring in English, won the third prize scholarship award of $500. Matthew B. Crumpler, a senior majoring in Biological Sciences, received honorable mention for his essay. These students received formal recognition of their achievement at the honors and awards ceremony of their college or department.

The essays by Keaton, Landfield, Stone and Crumpler have been submitted for possible publication in a new electronic journal, E-Agora. Founder and Editor-in-Chief Kelly Smith explains the name for the journal this way: “The Agora was the place where Socrates annoyed the citizens of Athens with his persistent questioning and this seemed an excellent title for what we have in mind.” E-Agora is an undergraduate journal devoted to applied philosophy, broadly conceived, and will be published under the auspices of the Center for Electronic and Digital Publishing—CEDP—housed in CAAH. Articles may cover a whole range of topics from political theory to ethical issues to social analysis. The editors will be making a special effort to reach out to a variety of student organizations on campuses within 100 miles or so from Clemson. The first issue of the journal is scheduled to appear in the Fall, 2002.

The Robert J. Rutland Center for Ethics announces the second annual J.T. Barton, Jr., Ethics Essay Competition. It is open to all Clemson University undergraduate students.

The 2002-2003 Presidential Colloquium theme is “Academic Integrity and the Integrity of the Academy.” Accordingly, the Rutland Center for Ethics poses the following question for the 2002 Barton Essay Competition:

Should Clemson University have an honor code that requires students to comply with the Academic Integrity Policy as well as report those who do not?
The PRESIDENTIAL COLLOQUIUM

2002-2003

Academic Integrity and the Integrity of the Academy

All events are open to public free of charge. Call 864.656.3040 or 864.656.5365 for details.