Pencil Your Calendars!

What: Jefferson Scholar Reunion
When: Next fall semester.
Why: To see old friends and meet the current Jeffersons

More details are coming soon

2007-2008 Officers and Committee Chairs

Officers
President: Madison Roberts
Vice President: Alex Hanes
Secretary: Erin Wissink
Treasurer: Chris San Miguel
Historians:
Lauren Forbes
Kirsten Simmons
First-Year Class Representative: Sindhu Ravishankar

Agri-Life and CHASS Council Representatives:
Bonnie Merrell
Kristen Gossett
Lisa Whalen

Service Chair: Ben Cook
Social Chair: Catherine Stuart
Fundraising Chair: Mary Wilson
Technology Chair: Thomas Cox

A Letter from the President
Madison Roberts

If I had to sum up this year in the life of the Thomas Jefferson Scholars in just one word, I’d have to go with "enthusiastic." Attendance is higher than any year I remember, and more and more upper classmen are staying heavily involved in the program. If we ever need volunteers for a committee (from t-shirts to the First Annual Egg Hunt), there’s no shortage of willing participants.

The best part is that Jeffersons don’t limit their enthusiasm just to our program. We’re interning, spearheading service projects, and leaders in other organizations. I feel like this year the Jefferson Scholars are really making an effort to be visible on campus. We made a fantastic showing at events like the Habitat for Humanity fundraiser "Shack-a-thon" and the Agri-Life Council’s first-ever Masquerade Ball. We’re also sporting new t-shirts designed by one of our own for the first time since 2004.

Because of the friendships we build, more and more Jeffersons network together in real life and on-line, sharing activities and encouragement with one another. Official and unofficial social events abound, from dinners together before meetings to nights filled with world domination in the board game Risk.

I feel confident that this year’s enthusiasm will last not just for the current classes of Jeffersons but also infect our new members next fall.

Here’s to the Jefferson Scholars of 2007-2008 for a phenomenal year!
The Fall Trip can be summed up in three words: Fellowship, Beach and Risk. This year, many of the freshmen were available to come out and bond with the Jeffersons, truly becoming a part of the group. We travelled down to Wilmington, North Carolina where we stayed with the most gracious of hosts, the parents of fellow Jefferson, Madison Roberts. Fellowship time included ice breaker games where we all learned unique things about our fellow Jeffersons. After roaming marshmallows and making smores, the sounds of card games, pool, and chattering people filled the house. Then, world domination ensued. About half of the group started playing a romp-roaming game of Risk which continued on into the night. One of the most memorable aspects of the global war was when Mary staged an uprising out of Quebec and conquered the world. Her unexpected uprising is still baffling us.

The next day, we visited the Fort Fisher Fort and Aquarium, where we were able to pet sea turtles and sea urchins, see sharks and a gigantic skeleton of a whale. There were even glowing jellyfish that floated around doing jellyfish activities. As exciting as those exhibits were, though, nothing could top off the alligator feeding. At the fort we saw an electronic reenactment of a civil war battle and got to marvel at several giant cannons. After the aquarium and fort, we were all a bit tired so we grabbed some lunch at a quaint Oceanside restaurant where some great seafood was shelled out by the chef. Then we got ice cream at the pier and enjoyed some rest and Frisbee on the beach. We had a grand time enjoying the pleasures of North Carolina's coast, even if we did lose a Frisbee or two. Dinner was a delectable Italian staple of spaghetti and meatballs that was prepared by several of the Jeffersons. It was delicious. The second night was quite similar to the first, with everyone enjoying themselves and getting to know each other. We played pool, cards and some people even stayed up until three in the morning playing Risk again. The next morning we woke up and Madison took some of us to see one the only endemic populations of Venus fly traps in the world. They were a little on the small side due to the drought, but that did not diminish from the grandeur the carnivorous plants provided. We left our beach retreat with fond memories and wonderful new friendships with our Jefferson compatriots, and a couple Krispy Kreme donuts to sweeten the ride home.

Jeffersons Bond and Dominate the World!
by Brian Parham, and Ben Cook

Member Spotlights

Shevon Barnes (1st year, Animal Science and Arts Applications) is a member of the University Scholars Program and participated in an alternative fall break trip to Asheville.

Delores Cisneros (1st year, Zoology and English) is a Lab Assistant for Dr. Craig Sullivan in the Zoology Department and is the secretary for the Wood Hall Council.

Sarah Collman (1st year, Biology) is a member of Sigma Kappa.

Stephanie Conner (1st year, Environmental Science and Psychology) led a leadership camp last summer for high school students and is traveling to Philadelphia over spring break to work with inner-city missions.

Trisha Gooding (1st year, Zoology and Psychology) is a co-leader for a local Girl Scout Troop in Raleigh.

From the Faculty Perspective
Dr. William Kneller

You don’t need to be told that being a Jefferson Scholar was a great experience, but let me tell you about its pleasures for a professor. On a big and ever-growing campus, I get to know well a few dozen of the best students. I mean know them as great people, not just grades and resumes. And I get to teach in the true manner. What a great atmosphere to engage with a group that has known each other, and me, outside the classroom. I’ve always thought that knowledge should transcend many fields, and Jeffersons are as diverse and talented as ever. Creativity may come with the oddest of connections, and believe me, the Jeffersons continue to surprise and delight me with their interests and of course their oddities.

So what do we faculty in the Program do in return? We have committed to the small, special classes. John Riddle has retired from the first-year course (but never fear, he and Gerry Elkan continue to be part of us). Now we have Bob Beckmann’s ethnobotany class for the first year, and Risa Ellvich with cultural anthropology for sophomores. I’m still teaching history of biology in the third year. It’s expensive to set aside these teachers for small classes, but we know their value for the Jeffersons.

In fact, much of what we’ve learned came from your experiences and what you taught us. So we try to encourage real input from the Jeffersons. The officers council, already a strong tradition, has added a first-year representative. Officers meet regularly with the faculty and the CALS Dean’s office. Gerry Lugubndum, from Microbiology, is now an Assistant Director in Academic Programs, committed to working with and supporting the Jeffersons. She’s a great addition, especially since Ken Eschenhade, Associate Dean for Academic Programs, is just as interested and involved in our well-being as ever. Still, students do much of the planning of activities and service, as it should be.

Over the years, I’ve learned what great mentors the Jeffersons are to each other. We continue to try to make the social fellowship and the academic experience all come together. It mostly works because the Jeffersons remain diversely talented, socially concerned, and full of ideas and energy. We keep trying to find that same kind of student as you were. May we keep fostering the wonderful spirit that defines the Jefferson Scholars.
How Being a Jefferson Scholar Has Helped Me Succeed as a Veterinarian
Kelly McAvoy

As a general rule, scientists care mostly about science. Don’t get me wrong—anatomy, pathology, physiology, biochemistry, and molecular biology all have a place in veterinary medicine. What many veterinarians fail to realize is that sociology, psychology, and philosophy play a significant role as well.

For the last 5 years, I have practiced in a relatively rural eastern North Carolina town about 50 minutes from Raleigh. Culturally, ethnically, financially, and linguistically, I have to adapt to a huge array of client needs and expectations. Something as simple as educating clients about the importance of neutering their animals means I run up against various education levels, ethnic values, religious beliefs, and anthropomorphized traits that I have to understand in order to communicate effectively with any particular client. Extending this analogy to treatment recommendations and euthanasia decisions means that unless I can establish a bond with my client, they will not be inclined to comply with anything I’ve said or recommended. If I can’t understand where they’re coming from, I will be incapable of making them understand me.

Client education and communication are arguably the most important aspects of private practice. Being able to anticipate what words and concepts clients won’t understand is crucial to a successful practice, though I admit to being stopped in my tracks by a client who needed further explanation of the word “testicles” in my standard why neuter your dog speech. I’m not still not sure I communicated that concept to the client!! Vets—at least the ones in practice—are teachers, first and foremost, and being able to draw upon my multi-disciplinary background helps me every single day to make some little connection or bond with a client, which allows me to better help their pets, which is the reason I became a vet in the first place.

The Jefferson Scholars allowed me access to a group of people who shared similar backgrounds and interests and encouraged me to develop my own diverse interests without making me feel like I was less qualified to be a vet for pursuing interests outside science. Ironically, I think that by developing my humanities background, I communicate better with clients and approach problem solving from a different angle than my strictly scientifically trained colleagues. From a cat named Middlemarch (Victorian literature) to Latino family dynamics (sociology) to a client’s reluctance to euthanize (philosophy and religion), the fields of social science are inescapably intertwined with those of “science” science when one deals with both people and medicine.

(I entered the Jefferson Scholars program in 1995 and graduated from CALS and CHASS in 1999 with a BS in Biology, a BA in English literature, and minors in both religion and history. I graduated from NCSU CVM in 2003 with a DVM.)

Member Spotlights

Kirsten Simmons (4th year, Animal Science and Spanish) is the recipient of the Department of Homeland Security scholarship and had an internship through the program at the Lawrence Livermore National Laboratory. She also spent fall semester of 2007 in Barcelona, Spain.

Katie Gensel (5th year, Zoology and Spanish) completed her UHP Capstone Project last summer, in which she designed an avian population survey that was carried out in a local patch of hardwood forest. She also worked in a food microbiology lab doing cell culture and virus assays. She hopes to do a Masters in Food Microbiology next year, then proceed to a PhD in either Food Micro or general Microbiology.

Madison Roberts (5th year, Horticulture and English) interned at Wake Technical Community College as a technical writer during the fall semester. She plans on graduating in December 2008.

Shack-a-Thon
Trisha Gooding

Shack-a-thon is a yearly event for the NC State community, where student organizations make an effort to raise money for the local chapter of Habitat for Humanity by requiring participating clubs to live in a shack out on the brickyard for a full week. Some clubs are extravagant and build wonderful homes, including our own Emerald City Castle. The Jeffersons shared a shack with the Ben Franklins and the Parks Scholars, two other prestigious academic club/scholarship programs.

For the full week, we had at least one person from one of the groups sitting or sleeping in our bright green castle pan handling for money out of our ruby red slipper. Luckily, we had a good spot and made a good bit of money to donate to the Habitat for Humanity.

Not only was the experience incredibly rewarding for the host of Shack-a-thon, but we Jeffersons enjoyed it as well. Many times during the week, Jeffersons would stop by to hang out with the other groups and work to raise money, while meeting new people with similar interests and aspirations. We also got to spend two nights in the shack. These nights were spent telling jokes, making runs for Chinese foods and/or sodas, playing Apples to Apples, and truly bonding with each other, especially when we had fourteen people sleeping in our shack during one night. It was a great experience both for community service and socially among our club members. Thankfully, we raised enough money to be guaranteed a spot on the Brickyard next year, so we hope to continue this in our future.

Member Spotlights

Caitlin Daniels (1st year, Zoology and Psychology) is a Park Scholar and a member of the University Scholars Program. She attended the National FFA Convention and will be representing North Carolina at the National 4-H Conference in Washington, DC this spring.

Erica Hall (1st year, Biology and Psychology) is a member of the University Scholars Program.
Member Spotlights

Jessie Kruse (1st year, Microbiology and Religion) is going to Guatemala with CSLEPS over Spring Break to work on Health Issues.

Daniel Norris (1st year, Biology and History) is the captain of the Fusion Percussion Winter Drumline and volunteers at the Wings of Eagles Therapeutic Horse Riding Ranch for special needs children.

Brian Parham (1st year, Ecology) is a Park Scholar and worked on the Krispy Kreme Challenge. He also is going on an Alternative Spring Break trip to Belize to work on Environmental Issues and is working on the Lifestraw Project with the Wolfpack Environmental Student Association.

Katherine Carter (2nd year, Biology and Psychology) is a camp counselor at Camp Trinity and is on the Design Team for the Fall Youth Conference at Trinity Center.

Vivid Vision—Gifting Vision to the Underprivileged

Sindhu Ravishankar

Last summer, my sister and I worked together to develop the project “Vivid Vision” in order to provide free optical examination, corrective lenses, and cataract surgery for those who could not afford eye care in rural India. Many of the patients I worked with did not have access to good medical care and were unable to pay for medical treatment. I wanted to make it convenient for such patients to have their vision checked and get appropriate treatment free of cost. I learned that lack of vision caused many of the patients to lose jobs, and made it hard for them to take care of their families. By improving their vision, I wanted to help the patients live independent lifestyles.

In order to raise funds for this project, I used my talent as a flutist to arrange and perform a fund-raising flute concert. Friends, organizations, schools, family and community members helped me raise $1725 and collect 300 pairs of eyeglasses. Lions club of Guntupet, India and Aravind Eye Hospital, India agreed to co-sponsor this project.

Working in an underdeveloped part of a different country posed many obstacles. Since a large portion of the targeted population was illiterate, we had to use many interesting forms of publicity. We hung banners up, volunteers went door-to-door in villages, and auto rickshaws drove around villages announcing the eye camp on loud speaker. Although there was an initial cultural barrier during the eye camps, knowing how to speak the local language, Kannada, helped me reach out to the patients on a personal level.

As hundreds of people lined up at the campsite, volunteers directed them to different booths for vision screening. I set up the eyeglasses I had collected and assisted patients in selecting frames. I explained different procedures to patients, led them to eye screening stations, and served as a translator between the nurses and patients. Overall 945 patients were screened, 180 patients received free prescription lenses, 257 patients had free cataract surgeries and 2 patients had a more complicated eye surgery. After the eye camp I joined the cataract patients on their five hour journey to Aravind Eye Hospital.

At Aravind Eye Hospital, I toured the facilities and learned about different eye care procedures. I was amazed at the hospital’s organization and efficiency in performing hundreds of cataract surgeries per day at a minimal cost. I even had the opportunity to watch a live cataract surgery on television. At the manufacturing facility of the hospital, I saw the complete computerized process of making a prescription lens.

"Vivid Vision" was really an eye opener for me. I was a first-hand witness to the implications lack of health care had on the underprivileged population. The sanitation in the areas I worked was very bad, illnesses spread rapidly through villages and doctors were scarce. Interacting with this kind of population convinced me that I wanted to work towards bettering healthcare around the world.

Member Spotlights

Mary Wilson (3rd year, Biology and French) is a member of the University Scholars Program and the CALS Honors Program. She is a Caldwell Fellow and is going to Puebla, Mexico with them as an alternative spring break service trip.

Catherine Casey (4th year, Biology and Psychology) will spend her spring break in Medellin, Colombia with her mom. She also is a CALS Ambassador and helped to host 40 schools at the National Agricultural Ambassador Conference at NC State in January.

Alex Hanes (4th year, Biology and Spanish) took part in the International Student Volunteer program in Costa Rica last summer and is presenting her genetics research at the Spring Symposium.

Erin Wissink (4th year, Biology and History) will spend her spring break in New Orleans with Alternative Spring Break to provide Katrina relief and is a member of the CALS Honors Program.
I spent my summer working in the Research Triangle Park at the National Institute of Environmental Life Sciences. I was a Summer of Discovery student, meaning that I worked in a lab, attended seminars with other students, and presented my work in a poster session at the end of the summer. I had heard of this program the year before at an undergraduate research symposium and learned more at the CALS Career Fair. My goals for summer research were to stay local and to get involved with work that would impact human health, so NIEHS was perfect for me. My interest is in genetics, and exciting work is happening there. I applied online and then contacted researchers who had appealing projects. I was in Hawai’i at the time, so I had to do phone interviews, which I initially found quite nerve-wracking, but my interviewers were genuinely interested in me and welcomed questions about anything, including what exactly their research meant, how the lab was structured, and where their lab animals come from. I chose and was chosen by Serena Dudek’s neurobiology lab which studies synaptic plasticity. My role was to work with one of her post-doctorates and to use molecular biology to investigate the expression of Arc, a gene involved in long-term memory storage. I learned how to extract RNA, figure out what is attached to chromatins, and most importantly, how to think about science problems. I feel more confident now with posing scientific questions, designing experiments, and analyzing data. In addition, my lab mates were extraordinarily helpful and nice. We always had lunch together and would talk over afternoon tea-time.

I looked at the cover letter that I wrote for my application a year ago and was surprised by how much my future research goals have changed in that time period. One reason that I have redefined my goals was because of this internship. I now want to study gene regulation when I get to grad school, not cancer biology. One reason that I have redefined my goals was because of this internship. I now want to study gene regulation when I get to grad school, not cancer biology. I feel more capable of doing this work. Internships are a great opportunity for all students! I spent my summer working in the Research Triangle Park at the National Institute of Environmental Life Sciences. I was a Summer of Discovery student, meaning that I worked in a lab, attended seminars with other students, and presented my work in a poster session at the end of the summer. I had heard of this program the year before at an undergraduate research symposium and learned more at the CALS Career Fair. My goals for summer research were to stay local and to get involved with work that would impact human health, so NIEHS was perfect for me. My interest is in genetics, and exciting work is happening there. I applied online and then contacted researchers who had appealing projects. I was in Hawai’i at the time, so I had to do phone interviews, which I initially found quite nerve-wracking, but my interviewers were genuinely interested in me and welcomed questions about anything, including what exactly their research meant, how the lab was structured, and where their lab animals come from. I chose and was chosen by Serena Dudek’s neurobiology lab which studies synaptic plasticity. My role was to work with one of her post-doctorates and to use molecular biology to investigate the expression of Arc, a gene involved in long-term memory storage. I learned how to extract RNA, figure out what is attached to chromatins, and most importantly, how to think about science problems. I feel more confident now with posing scientific questions, designing experiments, and analyzing data. In addition, my lab mates were extraordinarily helpful and nice. We always had lunch together and would talk over afternoon tea-time.

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Ethiopia: A Land of Firsts and Only’s

Tyler Barry

When I arrived in Ethiopia I had a little understanding of what to expect about the culture of the country. What I was not prepared for was the fierce pride that many Ethiopians have regarding their culture. I discovered that Ethiopians view themselves as a unique part of the world, and hold many claims that have affected us all. The following are a list of some of the firsts and only’s that are held by Ethiopia.

One: The Birthplace of Humanity
The Ethiopians hold the claim to the first recorded fossils that are claimed to be human. One of these fossils that many people might recognize is Lucy. Sadly she was leaving the country around the same time I was entering, and is currently housed in Houston, TX, so I was not given the opportunity to see her skeleton.

Two: First Christian Nation
While this can be disputed, many scholars place the coming of Christianity and the subsequent adoption by the King to be around the beginning of the 4th century AD, around the same time that Rome was beginning to tolerate Christianity. This has allowed for the formation of a distinctly Ethiopian Church that is still in existence today.

Three: First in Accepting Islam
During the early years of the Prophet’s teaching, the new religion of Islam was facing persecution from the Meccan ruling class. To protect his followers, Mohammed sent them away to the only kingdom that would accept them, Aksum in Ethiopia. Here his followers were granted asylum and are claimed by some to have converted the King of Aksum to Islam.

Four: Only African Nation to be Free of Colonization
Ethiopia escaped this fate after decisive victories against the Italians. While the Italians finally occupied Ethiopia just before WWII, it was not viewed as colonization, but as occupation. It was similar to the state of France during WWII when it was occupied by Germany.

Here are just a few examples of what makes Ethiopia a very unique place. The semester that I spent there greatly affected my attitudes on life and my view of the world. If anyone has a chance to travel to Ethiopia, if even for just a vacation, take the opportunity. You will not be disappointed.

Member Spotlights

Holly Parkins (2nd year, Animal Science and Spanish) has received scholarships from the Haywood County School system and the Walmart scholarship. Last summer she had an internship with three Vets from Mills River, NC.

Christopher San Miguel (2nd year, Biology and Psychology) is a Park Scholar and is the co-chair for this year’s Service Raleigh.

Leah Schaubach (2nd year, Biology and Arts Applications) founded the DanceLife Club at NC State and taught dance camps. She is also a founding member of ZAFI.

Catherine Stuart (2nd year, Applied Sociology and Psychology) is a research assistant in the Psychology department with the Family, Affects, Beliefs, and Behavior Lab.

On September 3rd, 2007, I boarded a plane with one suitcase and a Spanish-English dictionary and set out to spend four months with the IES program in Barcelona, Spain. The day had been a long time in coming. I’d had two study abroad programs fall through, and as a senior, this was my last chance to get abroad before graduation.

In most ways, the experience was everything I’d hoped it would be. I explored the city from Tibidabo to Barcelona and learned how to navigate the differences between Catalan and Castellano. Despite the exchange rate, I managed to travel on more than half of the weekend. I was there and visited Mallorca, Madrid, Andorra, Montserrat, Geneva, Cinque Terre, London, Dublin and the Netherlands. I enjoyed conversations with my Spanish-speaking host mother about Hugo Chavez and discussions in my classes on topics ranging from research theory to business ethics.

I also participated in the IES honors program and had the opportunity to work with Dr. Jordi Gomez from Barcelona’s Institute of Tropical Medicine. With his guidance I explored the controversy surrounding the role of the community health care worker and theorized how the various incarnations of the role could be adapted to assist in public education during a fast moving, infectious epidemic. I’m hoping to extend this subject a bit further for my Jefferson senior paper.

The semester seemed to fly past, and when the time came to leave I was sorry to say goodbye to the city. I have over 3000 pictures, lots of wonderful memories, an empty bank account and a desire to finish up my undergraduate work and get on with my life. I don’t know whether I’ll end up back in Barcelona, but if I do I’ll know what to say when I land - Bon Dia!

Member Spotlights

Tracy Turnbull (2nd year, Animal Science and Political Science) is assisting Dr. Pratt with an equine insulin study. She also applied for summer study abroad programs in Northern Ireland and Egypt.

Tyler Barry (3rd year, Zoology and Religious Studies) spent fall semester of 2007 studying in Ethiopia.

Kristen Gossot (3rd year, Agricultural Extension Education and Communications) is the winner of the Bob Jenkins Agricultural Scholarship, has the Farm Bureau Federation Internship, and has applied to study in Segovia, Spain during the summer.

Sarah Maness (3rd year, Biology and Spanish) studied abroad in Cuernavaca, Mexico during Summer of 2007 and is a member of the University Honors Program.

Shelly Swing (3rd year, Animal Science and Psychology) is a member of the University Scholars Program.