

GENEVA MAGAZINE

SUMMER 2010



STEM SCIENCE
TECHNOLOGY
ENGINEERING &
MATHEMATICS

calendar

August

13 Kennywood Day, Pittsburgh, Pa.

30 Fall semester begins

September

9-10 Colloquia Series – Dr. Dan Volz

25 College Search Receptions

Erie and Pittsburgh, Pa.; Hudson, Ohio

30 Chris Tomlin concert, Pittsburgh, Pa.

October

9 Homecoming

11-14 Colloquia Series – Dr. James Thwaites

15-17 Projecting Hope Film Fest, Fox Chapel, Pa.

15-19 Fall break

22-24 Projecting Hope Film Fest, Cranberry, Pa.

23 College Search Receptions

Philadelphia and South Hills, Pa.;

Baltimore, Md.

November

11-12 Colloquia Series – Dr. Jean Twenge

12-13 Family Weekend

23-29 Thanksgiving break

December

3-4 Genevans Christmas concert

4 December graduation reception

17 End of fall semester

Check the calendar at
www.geneva.edu

for more event listings, or
call 724.847.6520.

ON THE COVER: Geneva students race the GT-1
at the SAE Baja Series in Bellingham, Washington.

SHOW THE WORLD YOUR GT pride

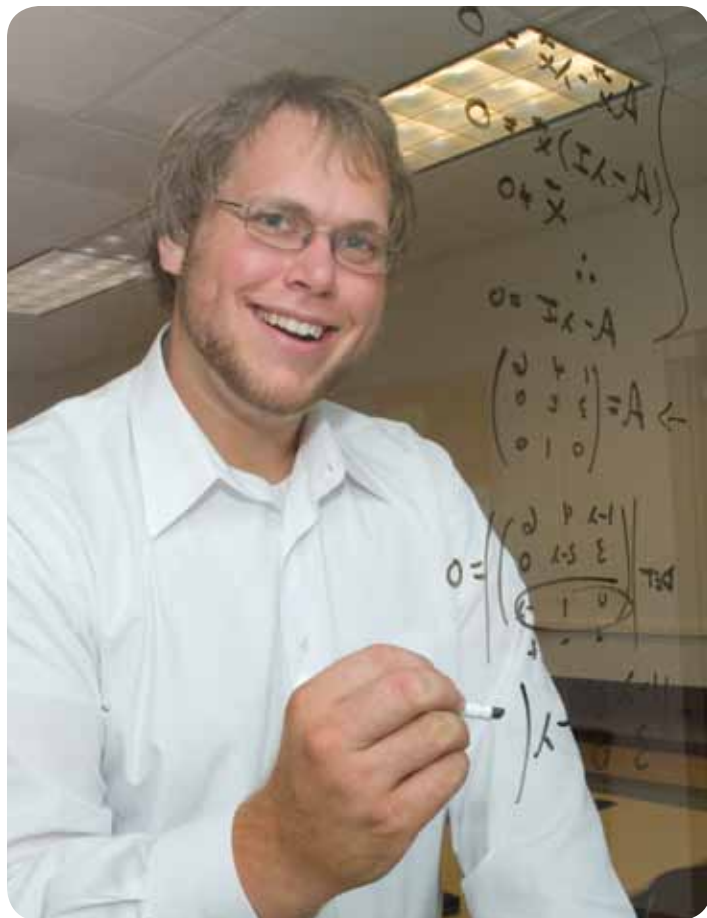
Summer is almost here
and so is the time for that
much-needed vacation.
Whatever your plans may be
— a cruise, a visit to another
country or a trip right here
in the good old USA —
celebrate your Geneva spirit
with the Traveling Tornado
Towel. Send us your photo,
and we will post it on the
college's website to share
with your fellow alumni.

To order your free towel, call
the Alumni Relations Office
at 724.847.6843 or go to
[www.geneva.edu/
tornado_towel](http://www.geneva.edu/tornado_towel).



GENEVA MAGAZINE

SUMMER 2010 CONTENTS



Geneva Magazine is published two times per year for Geneva College alumni, donors, students and parents. It showcases the college and its constituencies as they strive to fulfill the college's mission. Opinions expressed in *Geneva Magazine* are those of its contributors and do not necessarily represent the opinions of the editorial review board or the official position of the college.



GENEVA COLLEGE

Your feedback is greatly appreciated. Please send your correspondence to editor@geneva.edu or Geneva Magazine, Geneva College, 3200 College Avenue, Beaver Falls, PA 15010.

EDITOR

Jenny (Bower '05) Pichura

DESIGNER

Kristen Miller

EDITORIAL REVIEW BOARD

Dr. Todd Allen '91

Ann Burkhead '91

Dr. Ken Carson '79

Dr. Norman Carson '47

Linda Colbert

Dr. Byron Curtis '76

Dr. Megan Morton

Cheryl Johnston

Van Zanic '93

IN THIS ISSUE

- 8 Giving Servant-Leaders a Start
- 14 Inspiring a New Generation
- 16 Geneva Adopts a Genome
- 18 More Than Numbers
- 19 The Sky's Nowhere Near the Limit
- 20 Geneva Students Go Off-Road
- 24 Learning and Teaching
- 26 Portrait of a Chemist
- 28 Taking Responsibility
- 30 Grad School Success
- 32 A High Calling

IN EVERY ISSUE

- 2 From the President
- 3 In Brief
- 9 In Motion
- 34 In Service
- 40 In Conclusion

from the president

We live in a rapidly changing world, and as our scientific and technological capabilities increase, so do our problems. From the BP oil spill in the Gulf of Mexico to nuclear weapons threats, our society is facing some mammoth challenges. The fields of science, technology, engineering, and math (STEM) play a key role in finding answers to these complex questions, and Geneva College is committed to preparing men and women to answer the call.

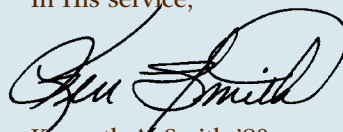
That preparation involves time, commitment, and hours spent in research, both on the parts of students and the faculty who teach them. And as these students immerse themselves in biology, biochemistry, biopsychology, chemistry, chemical engineering, mathematics, computer science, physics, engineering, and many areas in between, they are preparing to face challenges of a spiritual, as well as a professional nature.

"I am against religion because it teaches us to be satisfied with not understanding the world," wrote Richard Dawkins, British evolutionary biologist and author. Unfortunately, this is an all-too-common

perspective in the scientific community, but one which the STEM programs at Geneva College clearly challenge. Whether unlocking the secrets of the *Pedobacter heparinus* bacteria ("Geneva Adopts a Genome," page 16) or cleaning up a local stream ("Learning and Teaching," page 20), our science and technology majors are on a mission of discovery. And not only are they hungry to understand the world, they are also deeply committed to learning about the God who created it.

In this issue of *Geneva Magazine*, we are pleased to share some of the projects, courses, innovations, and programs that are preparing students to build Christ's kingdom in the scientific community. We are excited about their achievements and even more excited about the impact their future work will have on the world. Thank you for supporting these students through your prayers and your financial gifts, and we hope you enjoy reading their stories.

In His service,

A handwritten signature in black ink, appearing to read "Ken Smith", written in a cursive style.

Kenneth A. Smith '80
President

in brief

CAMPUS NEWS

New Majors



Sport Management

The Physical Education Department at Geneva College recently introduced its first major: sport management. Administered in conjunction with the Department of Business, the new major prepares students for leadership positions in areas such as athletic administration, sport/recreational facility management, coaching and event management.

"Sport is a dominant element of society," says Geneva's Athletic Director Dr. Kim Gall. "Christians are needed in the world of sport management as we attempt to redeem all of God's creation."

The goal of the sport management major is to prepare students to become a valuable part of the workforce in a

variety of venues within the sport culture. Through classes such as Biblical Management and Business Ethics, Facility Management and Design, and Legal Issues in Sport, students explore the theories and principles of management as applied to sport programs and facilities.

Biopsychology

A collaborative effort of the biology and psychology departments, Geneva's new biopsychology major will equip students to take advantage of dramatic advances in the understanding of the biological bases of behavior.

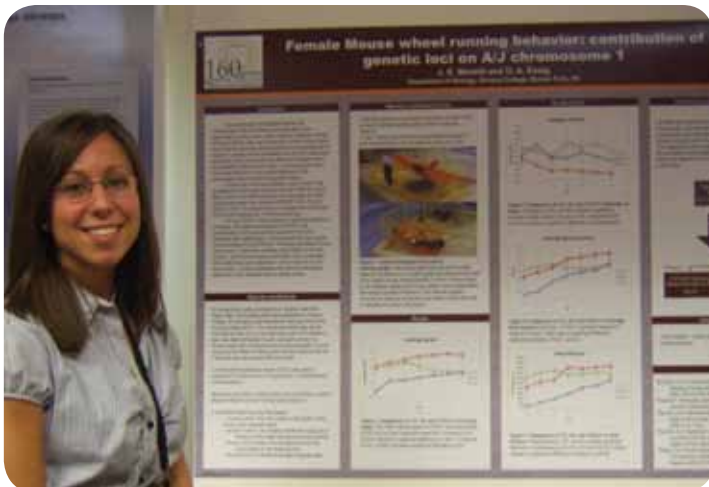
This unique program explores the relationships between physiological and psychological systems, while integrating biology, neuroscience and psychology with the Christian faith.

"In an academic climate that leans heavily towards a naturalistic explanation for all biological and behavioral phenomena, Geneva College brings the metaphysical reality of the triune God to bear on these conversations," says Dr. Danny Hitchcock, professor of psychology.

The major will effectively prepare students for careers such as research psychology, biology, nursing, cognitive science, medicine, neuroscience and behavioral neuroscience.



Geneva hosts regional bio symposium



Geneva College hosted the 31st Annual Undergraduate Biology Symposium for Western Pennsylvania on April 17. The event gives undergraduate students from area colleges and universities a forum to present their original research through presentations and posters.

Dr. Brad Goodner, professor and chair of the biology department at Hiram College, spoke on "The Good of the Many: Genomics & Undergraduate Education as a Mutually Beneficial Collaboration." Goodner has been nationally recognized both for his achievements in microbial genomics and innovations in undergraduate teaching.

Each year, the biology symposium is held at a different college or university in Western Pennsylvania. This was Geneva's first year as host.



Help.

By Bonnie Smith '12

A 7.0 earthquake struck the nation of Haiti on January 12, 2010, killing approximately 230,000 people and injuring another 300,000. The capital city of Port-au-Prince suffered much of the damage, but the devastating effects of the earthquake are being felt through the entire country.

In the remote villages of Haiti, the poorest people have no food and live in homes made of branches and rusting metal, since almost all of the aid sent into the country from other nations has been focused on Port-au-Prince. These were the people that Geneva College's Nurse Connie Erwin went to serve on a medical mission trip March 14 – 22.

"Since the earthquake, all the help is going to the people displaced and injured by it, leaving these villages starving," explains Erwin. "And the people there don't even know why it's happening."

Erwin has always felt God calling her to serve on a medical evangelism trip, and she applied to help as soon as the call was issued for medical personnel to come to Haiti. She was directed to the Fellowship of Associates of Medical Evangelism (FAME), a non-profit organization that sends teams throughout the world.

At the Haitian Christian Mission, Erwin and fellow team members cared for long lines of patients who managed to make their way to the medical camp. On alternate days, they traveled several hours to the villages — partly by bus and partly on foot — carrying 1,600 pounds of medicine and food packed in suitcases. In addition to caring for the villagers' physical needs, team members prayed with each patient, taking care to bind spiritual wounds as well.

"There's so much need. They practice voodoo there, and so it's difficult to bring the gospel sometimes, but the Christians who do live there are strong in their love and faith," she says.

To learn more about FAME, visit www.fameworld.org.

1. Haitian man learns the woodworking trade 2. Erwin and her husband, Dave, with village children 3. Little girl with healed burns 4. Woman caring for orphaned grandchildren 5. General hospital in Port-au-Prince 6. Patients waiting for clinic to open 7. Erwin made it her mission to clean and sanitize dirty instruments used in the hospitals 8. FAME doctor prays with a patient 9. Malnourished baby in children's ward 10. A hospital's burn unit 11. Home for a family of five 12. Child in a rural village





Seniors of 2010 donate class gift

The seniors of 2010 have changed the landscape of Geneva College. As their parting gift, they donated a 9,000-pound boulder that now rests between the Student Center and the Science & Engineering Building.

Seniors began fundraising for the nearly five-foot "Tornado Rock" in January 2010 and by May had exceeded their goal of \$750. The money they raised was matched dollar-for-dollar by the Geneva College Student Union (GCSU). Students will be able to paint the rock to advertise events, share announcements and promote campus pride.

"This gift is a very simple and visible way to give back to the school that has had such a huge impact on our lives. Hopefully, subsequent classes will have the desire and ability to contribute something similar," says Student Union President Kathleen Bolton.

In the past, other classes have given gifts to the college, but the tradition has been dormant for a number of years. The class of 2009 brought back the senior gift last year by planting shrubs in the shape of a G, and this year's class is the first to fund their gift using individual donations.



DR. JOSEPH BUCCI, professor of business, made two presentations on "Best Practices in College Teaching" at the Christian Business Faculty Association Annual Conference 2009 held in Rogers, Ark.

DR. JEFFERY COLE, professor of history and coordinator of Geneva's Semester in Rome program, will participate in a fully funded summer study of the Holocaust at Northwestern University in Chicago.

DR. TOM COPELAND, professor of political science and humanities, was selected to participate in a fully funded summer seminar that took him to Israel to study counter-terrorism methods.

DR. DAVID ESSIG, professor of biology, organized the 31st Annual Western Pennsylvania Biology Research Symposium, held at Geneva on April 17. He was also selected by the Department of Energy's Joint Genome Institute to collaborate in The Undergraduate Research Program in Microbial Genome Annotation (see page 16).

JOHN GALLO, assistant professor and program director for the Adult Degree Completion Program's human resources and organizational development majors, wrote a chapter for *Best Practices in the Integration of Faith and Learning for Adult and Online Learners*, to be published by the Council for Christian Colleges and Universities (CCCCU).

DR. DAVE GUTHRIE, professor of sociology and dean of faculty development, has been invited to speak at the New Faculty Seminar for the CCCU in Palm Beach this summer. He is also a plenary speaker at the Association of Christians in Student Development (ACSD) national conference.

SHA WANG LUANGKESORN, professor of music, performed as the featured artist of the Bank of America Dame Myra Hess Memorial Concert series February 17 at the Chicago Cultural Center. The concert was broadcast live on Chicago's WFMT 98.7.

DR. ESTHER MEEK, associate professor of philosophy, published an essay entitled "Servant Thinking: Polanyian Workings of the Framean Triad" as part of the book *Speaking the Truth in Love: The Theology of John M. Frame* (Phillipsburg, NJ: P&R Publishing, 2009).

DR. ERIC MILLER, professor of history and humanities, released his new book, *Hope In a Scattering Time: A Life of Christopher Lasch* (Grand Rapids, MI: Wm. B. Eerdmans Publishing Co., 2010).

DENISE MURPHY-GERBER, professor of business, was recently inducted into the Golden Key Honor Society for academic excellence in connection with the Ph.D. she is pursuing at Duquesne University.

DR. SCOTT SHIDEMANTLE, professor of biblical studies, led a student trip to Israel with Drs. Jonathan Watt and Byron Curtis in December 2009. They plan to organize the trip again in December 2011.

Founders Day 2010: Pro Christo et Patria

Founders Day, formerly known as Alumni Weekend, is an opportunity for the Geneva community to reflect on its history, honor alumni and celebrate the ongoing mission of Christian education. The theme of this year's celebration was *Pro Christo et Patria*, focusing on the college's long-standing commitment to Christ and country.

It's been 50 years since members of the **class of 1960** received their diplomas, but they can still call Geneva home. Special events were held in their honor on Friday, April 16. The college also hosted reunions for the classes of 1945, '50, '55, '70, '75 and '80, and for tennis, soccer and ministry alumni.

Ian Naismith presented his touring **History of Basketball Exhibit** in Metheny Fieldhouse during Founders Day weekend. His grandfather, James Naismith, invented the game in 1891, and the exhibit includes his personal support of Geneva College as the birthplace of college basketball.

Geneva students raced in the annual Big Wheel Rally and played a game of Little Bat on the campus tennis courts. Alumni also got to see the off-roading vehicle that a group of engineering seniors were building for the international SAE Baja Series (see page 22).

Dr. Tom Copeland '91, professor of political science and humanities, gave a presentation on Pro Christo et Patria and its role in the development of Geneva College.

The Distinguished Service Awards were presented at the annual Alumni Dinner. There were five honorees this year: Andrew Bernard '83; Larry Hardesty '90; President Kenneth A. Smith '80; Dr. John "Jack" E. Pinkerton '60 (posthumously), represented by his brother Bob Pinkerton; and Carolyn (Metcalf) Mollenkopf (not pictured).

The Veterans Plaza, located at the north entrance to Reeves Field, recognizes friends and alumni of Geneva who have served in the military. President Ken Smith, whose son is currently serving in Afghanistan, dedicated the plaza.

"It's important that we never forget those who have served our country — and especially those who have made the sacrifice with their very lives," he said.

U.S. Navy veteran Bill Orr '46 said with tears of appreciation, "This is a great spot. For me, it's a family thing. My brother, sister, wife, my whole family is part of Geneva College."





Guest Scholars and Speakers

Geneva welcomed a number of prominent guest lecturers to campus during the 2009 – 10 academic year, including:

Rev. Kefa Sempangi, founder of the Africa Foundation and author of *A Distant Grief*; Justice Week, September 23, 2009

Dr. James Payton, professor of history at Redeemer University College Colloquia Series, October 6 and 7, 2009

Dr. Mark Futato, professor at the Reformed Theological Seminary in Orlando; J.G. Vos Memorial Lecture Series, October 14-16, 2009

Rev. Edward Donnelly, pastor of Trinity Reformed Presbyterian Church in Belfast; Reformation Day, October 18, 2009

Rutha Harris, civil rights activist and musician
Martin Luther King Week, January 18, 2010

John Taylor Gatto, author, educator and school reform advocate
Colloquia Series, February 18-19, 2010

Dr. Jeanne Heffernan Schindler, author and professor of humanities and law at Villanova University; Colloquia Series, March 1, 2010

Dr. R.J. Snell, philosophy program director at Eastern University
Bitar Memorial Lecture Series, March 25-26, 2010



In Honor of Jessica



Jessica (Vojnovich '06) DeMarco studied, worked and lived with dedication. A double major in chemistry and chemical engineering, as well as a varsity softball player, she had more than a full schedule during her time at Geneva, but she handled all her commitments with discipline and grace.

When Jessica was killed in a tragic car accident in October 2009, her family directed memorial donations to Geneva's McCartney Library. John Doncevic, director of McCartney Library, together with Dr. John Stahl, chair of the chemistry department, decided to use these funds to renovate the upstairs science reading room in the Science & Engineering building.

"It was an area where Jessica spent a lot of her time, and that space really needed a sprucing up," Doncevic says.

S&E had undergone a complete renovation during Jessica's freshman and sophomore years at Geneva, but due to cost, the science library had been relatively untouched. Now, cracked plaster is completely repaired and repainted, comfortable leather chairs have replaced secondhand furniture, and a long, bar-style computer desk provides outlets and wireless access for laptop use. But not everything has been changed. The sturdy hexagonal worktables where Jess spent countless hours studying and working on engineering projects remain exactly as she left them.

"Our lives fit together something like the individual threads that make up a rope ... the strength of the rope comes from how the threads touch each other; how they are woven together," Stahl said in dedicating the room. "We are all grateful that Jessica's life, her thread, connected with ours. And we desire to remember and carry on in the same spirit that she so remarkably displayed ... As future students study in this room and work and learn in this building, their lives will in a way touch upon Jessica's life, as God continues to build His kingdom."



Genevans tour Great Britain

The Genevans choir travels on a European tour every four years, and this year, they performed throughout Ireland, England and Scotland. Led by Director Robert Copeland, they sang in venues including Stirling Castle, St. Giles Cathedral in Glasgow and All Souls' Church in London.



Left to right: Jessica's sister, Jamie; her parents, Sam and Terri; and her husband, Dan.

Giving Servant-Leaders a Start

Norman '47 and Beverly (Hanson) Carson '70 are people who give. Whether it's time, talents or financial resources, they are ready and willing to share whatever they have for the good of God's kingdom. They are committed to Geneva College as one way of building that kingdom, and they have a special place in their hearts for students — especially English majors.

Norman graduated from Geneva with an English degree and returned as a professor of English in 1957. He spent the next 34 years teaching at Geneva, and he also served as chair of the English department and managing editor of the *Geneva Magazine*.

"I loved teaching," Norman says. "Every fall, I would go through this period of, 'Oh boy, another year of teaching, and I don't know if I'm up to it.' But after one day in the classroom, I was ready to go."

In 2006, the Carsons established a scholarship to benefit English majors with a focus in writing. In order to qualify, students are required to have some financial need, to be in good academic standing with the college and demonstrate a strong Christian commitment.

The Carsons have a variety of reasons for why they chose to establish a scholarship, but their primary motivation was Geneva's mission of Christ-centered higher education. With every class taught from a Christian perspective and every faculty member working for God's glory, students learn to view everything through the eyes of faith.

This year, the Carsons' scholarship will benefit three writing majors at Geneva: Kayla Rowles, Emily Shilts and Sarah Wilson.

Sarah had the opportunity to meet the Carsons at this year's Scholarship Appreciation Dinner. She was thrilled to receive their scholarship and says it's a huge blessing for her. She loves being part of the Geneva community, and her professors and classes are preparing her to reach her goals for the future.

"I want to be an author, but now I'm leaning more towards getting my MFA [Master of Fine Arts] in writing and then becoming a professor," Sarah says.

But whatever these students choose to pursue in their careers, the Carsons have one overarching hope for them.

"I just want them to retain their allegiance to Christ and be good, true servant-leaders," Norman says. "Just the kind of graduate we like to see."



Geneva College would not be where it is today without the generosity of its people. From prayers and faithful service to scholarship funds and endowments, every gift builds the college and supports our students. To learn more about giving to Geneva, call 724.847.6516 or visit www.geneva.edu.

Finishing Strong

Geneva College men's basketball rides wave to NCCAA Nationals

BY VAN ZANIC '93



The Geneva College men's basketball team made an impressive late-season run this year. Finishing the regular season with a 14-11 record, the Golden Tornadoes qualified for the NCCAA (National Christian College Athletic Association) East Regional Tournament against the likes of NAIA Roberts Wesleyan and NCAA Division II Nyack. The Golden Tornadoes dispatched both teams on the Metheny Fieldhouse floor to qualify for their fourth trip to the NCCAA national tournament since Jeff Santarsiero took over as head coach 15 years ago.

Geneva was one of eight schools that qualified for the national tournament, and participation involved more

than actual play. The tournament also included a service project that entailed reading books to kids at a local private school.

How did Geneva fare on the court? After dropping the first game of the tournament to Mid-Continent University, the Golden Tornadoes defeated Mid-American Christian and Palm Beach Atlantic for a fifth-place overall finish.

"The key to our success was simple," says Santarsiero. "Every player on our roster knew and accepted his role by season's end. There was not one guy interested in getting headlines or credit. It was all about the team and what each player could do to help us win games. We had a great core of upperclassmen that led the way on and off the court."

CONSISTENCY = SUCCESS

Nothing solidifies an athletic program more than a consistent coaching staff — one that exemplifies an ideal of success and achievement.

Head baseball coach **ALAN SUMNER** recently became the first Geneva College coach in any sport to win 500 games at the school. On the first day of the 2010 season, the Golden Tornadoes swept a doubleheader from Martin Luther College, and Sumner reached the 500-win plateau. He has been a symbol of excellence throughout his 22 years at Geneva.

Head football coach **GENO DEMARCO** has guided the Golden Tornadoes to more wins than any other coach in the history of Geneva football. Following an 8-3 season and an NCCAA Victory

Bowl title in 2009, DeMarco has won 116 games in his 17 years. Just two years ago, he became the first Geneva football coach to reach the 100-win mark for his career.

Coach **JEFF SANTARSIERO** has been a fixture on the Geneva College men's basketball bench for the past 15 years. Santarsiero has seen his Geneva teams win 230 games, and during this season's trip to the NCCAA national tournament, he reached his 300th overall career win.

Geneva's softball head coach of eight years, **VAN ZANIC**, picked up his 200th career victory on the final day of the 2009 season. He has seen his teams win more games than any other softball coach in school history.



THE GOLDEN TORNADOES

TOP TEN FROM 2009-10

1. **The First Annual NADO Awards** culminate with the Award for Courage, presented to Geneva student and football player Anthony D'Ambrosia for his continued fight against leukemia.
2. **The Geneva College football team** captures their fourth NCCAA Victory Bowl title with a win over Greenville College by the score of 29-28.
3. In his 22nd season at the helm, **Geneva baseball coach Alan Sumner** claims his 500th career victory in the second game of the year. The Golden Tornadoes defeated Martin Luther College in the second game of a doubleheader to reach the coaching milestone.
4. **Geneva women's softball** pairs with the Friends of Jaclyn program to adopt 16-year-old Meranda Carsey, who was diagnosed with brain cancer in the spring of 2009, as an honorary member of the team. Friends of Jaclyn matches pediatric brain cancer patients with college teams across the country.
5. **Richard Colick of the men's basketball team** is named an NCCAA first team All-American for the second consecutive year. Colick led the Golden Tornadoes to an 18-12 overall record and a trip to the NCCAA national tournament while becoming the 13th junior to reach the 1,000-point plateau.
6. **The Geneva College men's and women's soccer teams** each qualified for the NCCAA East regional tournament. The men finished with an impressive 15-5 overall record.
7. **The women's cross country team** at Geneva is honored by the NCCAA for excellence in the classroom as one of only a few Scholar-Athlete teams with a GPA that exceeded a 3.4.
8. **Head men's basketball coach Jeff Santarsiero** wins his 300th career game in the NCCAA East region championship. Ironically, the milestone victory came against his alma mater, Nyack College, where he starred as a player and began his coaching career with the Nyack women's program.
9. **A total of 16 student-athletes** in 27 different events qualify for the NCCAA national track and field meet. The Golden Tornadoes brought home a total of seven top-10 finishes on the national stage.
10. **Adriane Blake** captures her second consecutive NCCAA All-American honor for her work with the Geneva volleyball team. The Golden Tornadoes finished the 2009 campaign with a record of 19-12, with Blake leading the Presidents' Athletic Conference in kills.

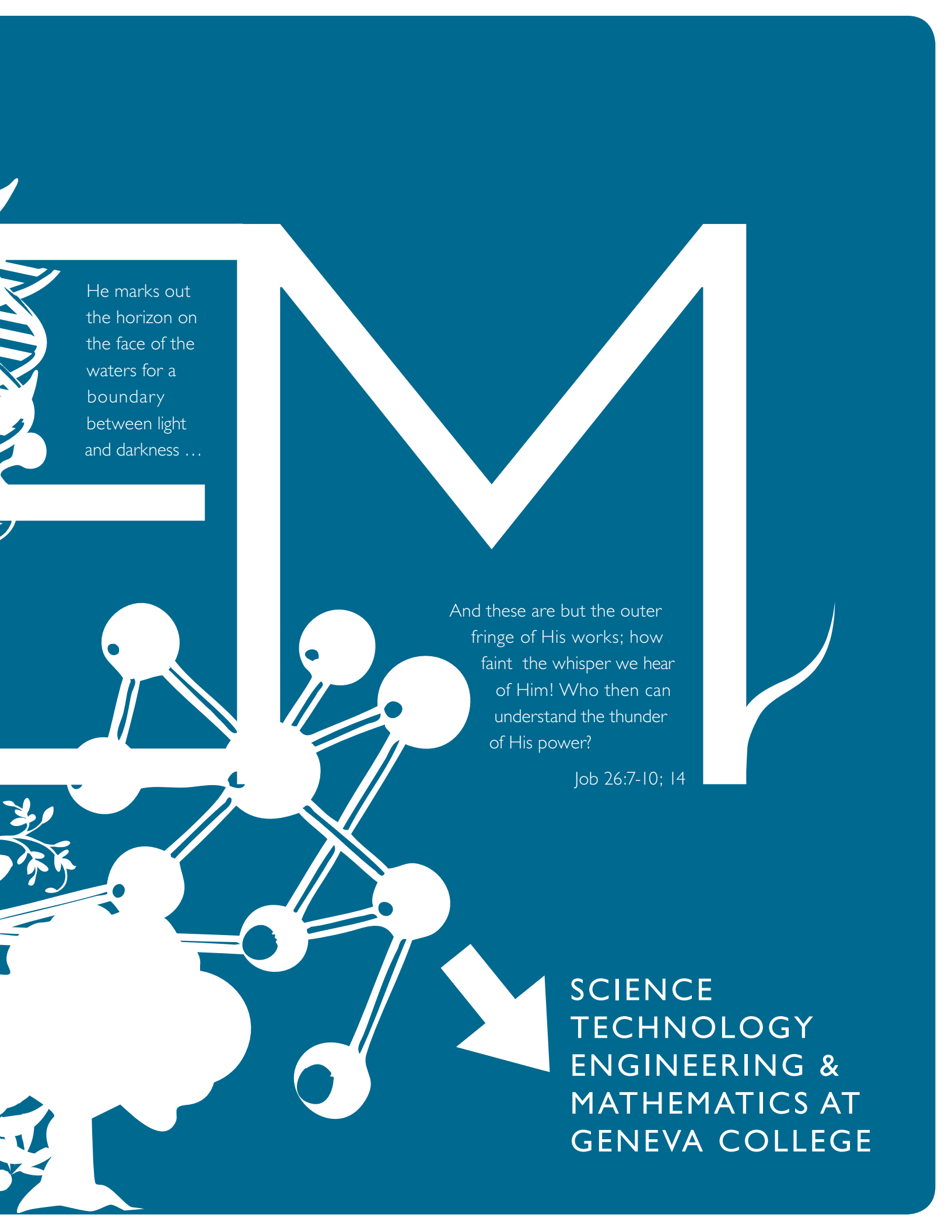
STILL

He wraps up the waters in His clouds, yet
the clouds do not burst under their weight.

He spreads out the
northern skies over empty
space; He suspends the
earth over nothing.

He covers the face
of the full moon,
spreading His
clouds over it.





He marks out
the horizon on
the face of the
waters for a
boundary
between light
and darkness ...

And these are but the outer
fringe of His works; how
faint the whisper we hear
of Him! Who then can
understand the thunder
of His power?

Job 26:7-10; 14

SCIENCE
TECHNOLOGY
ENGINEERING &
MATHEMATICS AT
GENEVA COLLEGE



INSPIRING A NEW GENERATION

In the hallways of Geneva's Science & Engineering building, college students are preparing for careers in science, technology, engineering and math (STEM). But they aren't the only ones. In the fall of 2009, a group of elementary- and middle-school students built and programmed a robot to compete in *FIRST* LEGO League, a worldwide competition designed to build character and inspire kids to pursue the STEM fields.

The formation of this team began with a discussion among a group of homeschooling moms in the Beaver Valley. Julia Chaney '92, home educator, Geneva psychology grad and daughter of now-retired Spanish professor Dr. Richard Evans, thought the *FIRST* competition would be a great opportunity for the kids' educational and personal growth.

"It's not just about robots, but also about how children of all skills, levels and abilities work on a problem together," Chaney says. "I love that. *FIRST* Robotics helps kids believe they can go into the STEM careers."

The team (ages 9 - 13) called themselves the Golden Arrows and registered for the Pittsburgh competition, which would be held at the Carnegie Mellon University National Robotics Engineering Center in December.

One of the team members was Isaac Che, the son of Geneva College engineering professor Dr. David Che. As soon as Che heard about the project, he thought it would be great to get Geneva students involved.

Geneva had sponsored similar events in the past, and engineering department chair Dr. James Gidley was highly supportive when Che presented the idea to him. Gidley also encouraged Che to make the program a service-learning opportunity for Geneva students. The whole activity was blessed by the college under the one-credit course Service-Learning: Mentoring Lego Robotics Team. The college provided the group with classroom space, and Dr. Gidley came to the team's first meeting to pray and introduce them to Geneva.

Senior mechanical engineering major Joel Dille was the first to respond to Che's request for a student mentor. With his love for kids and robotics work, the opportunity was a perfect fit, even though Joel was unaccustomed to working with the younger age groups.

“THIS WAS NOT JUST A ROBOTICS COMPETITION — IT WAS A COMBINATION OF ALL THE SKILLS NEEDED TO GO INTO THESE STEM FIELDS.”

“Joel, together with my older son Benjamin, would come on Friday evenings after class to work with them on their robot’s programming,” Che says.

The topic for this year’s competition was “smart moves.” The Golden Arrows’ research project was to transport mobile surgical units, especially to mountainous places where it’s difficult for planes to land.

“All of the kids had excellent ideas. I love the imagination of children,” Joel says.

Joel and Ben worked with the kids throughout the fall semester, and Julia’s brother Rich Evans ’90, a Geneva engineering graduate who now works for NASA, also came several times to volunteer and coach the team. All the long hours of hard work paid off, and by the time the December competition rolled around, the robot was ready to go.

There were 72 teams at the event, and each had to compete on the same field set-up: overcoming obstacles and completing different challenges to manipulate the course and complete their missions. The competition also included an oral presentation.


“This was not just a robotics competition — it was a combination of the skills needed to go into these

STEM fields,” Chaney says. “Students are judged 25 percent on their robot’s performance, 25 percent on design, 25 percent on research and 25 percent on teamwork.”

In the robot’s performance on the challenge course, the Golden Arrows came in 52nd out of 72, but they placed 20th overall. That was a good result for a first-year team. And next time, the Golden Arrows won’t be rookies anymore. The *FIRST* LEGO League competition is held every fall, and by September 2010, the team plans to be back in the game designing a new robot.

JULIA CHANEY ’92



And maybe, in a few more years, some of those kids might be students at Geneva College, getting ready to put teamwork, knowledge and imagination to the test in STEM careers. 

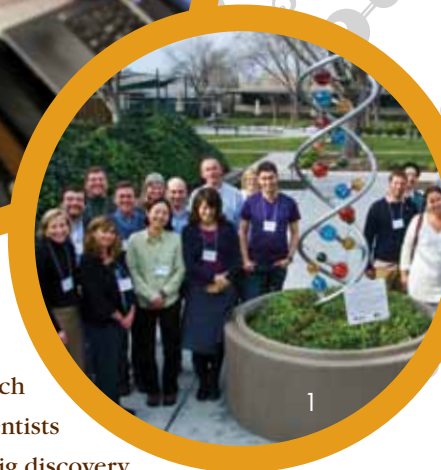


FIRST LEGO League and Junior FIRST LEGO League (left to right, from front row): Isaac Che, Elizabeth Che, Joseph Chaney, Zachary Labon, Rebekah Cox, Kira Labon, Peter Collings, Noah Hitchcock, Caleb Lutz, Jacob Lutz, Jonah Hitchcock, Fiona Chaney, Joel Dille, Ben Che, James Lutz, Elly Frey, Caleb Collings, Jared Lewis





GENEVA Adopts a GENOME



In the STEM world, research is vital. But not just to scientists on the verge of the next big discovery. The research process also serves as a multifaceted tool in undergraduate education.

However, real-world research opportunities are often hard to come by for undergrad students. They require funding, intensive faculty preparation and supervision, and facilities that are often beyond the capacity of small colleges and universities. But through a unique initiative of the Department of Energy's Joint Genome Institute (JGI), those limitations are beginning to change.

The project is called the Undergraduate Microbial Genome Annotation Program, and Geneva College is currently one of 20 schools in the United States selected to participate. Each institution has "adopted" a specific type of bacteria or archaea to study, and students become their bacteria's curators, or caretakers. They use specialized software to analyze sets of genes within their bacteria's DNA, decoding information and testing computer-generated data with human reasoning. After the genes have been analyzed and the information checked and approved, the data is uploaded into an online repository and becomes publicly available. Why?

"Microbiologists speculate there could be close to half a million species of bacteria, yet we only have found about 1,000," says Dr. David Essig, professor of biology and head of the genomics project at Geneva.

Geneva has adopted a relatively unstudied soil bacterium called *Pedobacter heparinus*. The word heparinus comes from heparin, a complex sugar which inhibits blood-clotting in our bodies. The *Pedobacter* bacteria, which is found in dry soil everywhere, can actually metabolize heparin and use it as an energy source.

"The Department of Energy is hoping we can find something unique about this bacteria to help them break down contaminants in the soil or somehow make energy production more effective," says Associate Professor of Chemistry Dr. Rodney Austin.

Because very little is known about this organism, the likelihood of exciting discoveries and interesting variations is high. Over the next three or four years, exploration of the *Pedobacter heparinus* genome will spread across the curriculum in other courses like biochemistry, genetics, molecular biology, ecology and microbiology.

Essig and Austin began this cross-curricular exploration at Geneva this spring. They attended a training conference at the JGI in San Francisco in January, and throughout the spring semester, they each taught a course exploring complementary aspects of the project uniquely related to their disciplines. Essig's Bioinformatics class focuses on using computer software to identify the bacteria's genes, while Austin's Biochemistry class is currently dealing with a specific protein within the organism.

“Essentially, an organism has lots of information encoded in its DNA, some of which specifies the sequences of proteins,” Austin explains. “The millions and millions of individual codes in the DNA tell a story about an organism’s makeup, function and structure. These codes can be decrypted using the right tools, which include increasingly powerful software programs. By decrypting the codes, we can determine important sequences of DNA (genes) that exist. Often, several closely related genes are encoded spatially close to one another. All of this information can be important in understanding the organism.”

There are a number of generic computer programs that will run analyses on the bacteria’s genetic sequence, but most are based on a standard *E. coli* model that may or may not be similar to Geneva’s bacteria. This is where cross-disciplinary collaboration comes in again.

Dan Kennedy is a senior computer science major with an interest in bio-informatics. He has no background in the life sciences, and he chose to major in computer science because he wanted to play video games. But as he started looking beyond college to graduate school possibilities, he realized that his technological skills could really make a difference in people’s lives. The field of bio-informatics caught his particular interest, and he worked with Essig all semester to write the specialized web programs needed to view and analyze the bacteria’s internal code.


Along with the students in the genomics classes, Dan is helping to contribute new and meaningful information to the scientific community, something not many undergrads get to experience.

“When you’re doing research as an undergraduate, you’re not necessarily doing something that’s novel or brand-new in the

world, but you’re maybe repeating things or making small changes,” Austin says. “This project gives us a context in which to do our science, and through that, we can incorporate the research into our classrooms and into our laboratories.”

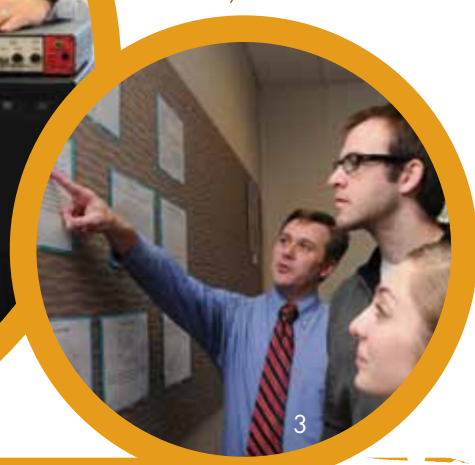
Essig agrees, adding that the project motivates students to do their best, because the quality of their work means more than just a grade: it will have a serious impact in the real world.

Since applying to the genomics annotation program in the summer of 2009, he has become increasingly impressed by the magnitude of the project, which could hold long-term possibilities for cross-disciplinary faculty research, publication, curriculum development and more.

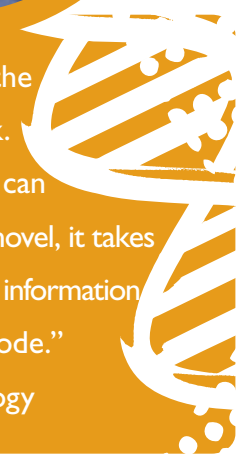
“This is much bigger than I originally thought,” Essig says, “Going beyond scratching the surface to really making a contribution. It’s going to have some significant long-term effects.” 



1. The DOE Joint Genome Institute in San Francisco 2. Dr. David Essig 3. Dr. Rodney Austin



“DNA is like a code, and decoding the genome is just like reading a book. You can read a paragraph and you can use your imagination; like reading a novel, it takes you to certain places. It’s loaded with information but you have to understand the code.”
Dr. David Essig, professor of biology






More than Numbers

Geneva Magazine asks Matthew Schroeder — triple-majoring in applied mathematics, computer science and physics — **How has a Christian liberal arts education shaped the way you think about mathematics?**

Math is a very objective field, and that brings questions to both philosophy and faith. You have to prepare yourself, knowing full well in advance that most of the modern physicists, at least a large majority of them, are not necessarily Christian. It makes you question where you stand in faith. It's great being in a supportive environment like Geneva while you do that.

Math is a type of reasoning. Just like anything else, it's a type of thinking. Math isn't about $a + b = c$. Math is more about why does $a + b = c$? As you get into the higher levels of math, you explore more philosophical questions. What happens if $a + b$ doesn't equal c all the time?

One of the good things about the liberal arts — especially Christian liberal arts at Geneva — is that I'm getting the math side of things, but to answer my questions I'm looking also to the philosophy classes, to the biblical references, to political science. How does a Christian go into the world and think? And Geneva doesn't just tell you, 'you should think this way.' You're tested on different schools of thought, and you have to choose and defend your own. 

MATTHEW SCHROEDER

Graduation year: 2011 **Majors:**

Applied Mathematics, Computer Science and Physics **Hometown:** Valencia, Pa.

Extracurricular activities: Vice president of math club; teaching assistant for College Physics II, Introduction to the Natural Sciences and General Chemistry; leadership staff for freshman orientation; Quest missions trips to New York, N.Y., Aliquippa, Pa., and Charleston, S.C. **Summer plans:** Joining a select group of mathematics, science and engineering majors in the 2010 Modeling and Simulation in Systems Biology (MSSB) program at Virginia Polytechnic Institute and State University.





The Sky's Nowhere Near the Limit

For almost 10 years, John Stein (pictured), professor of mathematics and astronomy, and John Schaefer, professor of physics, have been pursuing a vision. They want to open the skies to Geneva College students and the community by building an astronomical observatory.

That dream is finally on the brink of reality.

Stein and Schaefer have received approval to build the observatory in a clearing outside Geneva's baseball field, which is located about four blocks from the campus. They have also purchased a telescope and instrumentation.

"We've got everything we need except for a building to put it in," Stein says. "Once we meet our fundraising goal, we can have the observatory up and running in about eight months."

Stein and Schaefer currently teach two astronomy courses at Geneva. The opening of an observatory — equipped with the Meade RCX400 telescope now residing in the Science & Engineering building — would open up a wealth of new opportunities for both class work and hands-on research.

"One project we're looking at involves taking a closer look at near Earth objects (NEOs): asteroids and comets whose orbits around the sun allow them to make close approaches to the Earth," Stein says. "Concern over the rate at which


these objects collide with Earth has prompted NASA to support a variety of research projects in this area."

He and Schaefer will also be working with students to study exoplanets. Orbiting stars other than our sun, these exoplanets can be observed by the slight dimming that occurs when they pass in front of those stars.

The observatory is the ideal educational tool, inspiring wonder and curiosity by allowing students to physically experience what they are studying. Once the facility has been completed, Stein plans to hold public outreach events to make these experiences available to the community.

"These educational programs can be geared toward after-school programs, churches, scouts, groups or individuals — whoever's interested," Stein says.

In addition to scheduled lectures and evening observations, the observatory will give people a place to view celestial events, such as comets and eclipses of the moon. The telescope also has the capability of sharing these events with local television stations.

"As Christians, we know the truth and our job is to inform people. Psalm 116 talks about the 'wonders of the heavens,' but you can't begin to realize the depth of that wonder if you don't understand what's up there," Stein says. 

Support the Project

The total cost of the observatory is \$243,000, and gifts to date currently total \$85,000. That leaves an amount of \$158,000 needed to complete the project. If you would like to learn more about the observatory, or if God has laid it on your heart to give a gift, please contact the Institutional Advancement Office at 724.847.6516.



Most Geneva College seniors heaved a sigh of relief on graduation day, but not Nick Bloom, Scott Miner, Logan Kibler, Frank Cacciotti, Phil Ritenour and Matt Susa. These senior engineering majors wouldn't be in the clear until the weekend of May 19 when they would be the first Geneva students ever to compete in the Society of Automotive Engineers (SAE) Baja Series.

The SAE Baja Series originated at the University of South Carolina in 1976, and since then, it has become a premier design challenge for engineering students worldwide. Each team is given a 10-horsepower, Briggs & Stratton Intek Model 20 engine. Around that engine, they must design and build a prototype of a rugged, single-seat, recreational vehicle that is safe and can withstand a strenuous, four-hour off-road race.

When this group of Geneva students first saw the SAE Baja Series on the list of options available for their Senior Design course, they knew they wanted to compete. They didn't fully realize at that time what a tremendous project they were undertaking, but faculty adviser Dr. David Che and engineering department chair Dr. James Gidley knew early on that these students had what it takes.

"Once we were officially assigned to the project, we had to decide what we were doing," says team captain Nick Bloom, the lone electrical engineer on the team. "Understanding the competition took probably a month of reading through the rule book and getting information about competitions in the past by looking at pictures and videos."

Although figuring the competition out was tough, the team found support from Geneva College faculty, community members and even seasoned opponents in the competition, including Grove City College and Fairmont State University.

The team also received support and technical advice from Don Bolland Sr., owner of Bolland Machine, and Mark Bergfelt of the Evangelical Free Church in Chippewa, Pennsylvania.

Designing the vehicle wasn't easy, considering that each team member had his own opinion about what would work and what wouldn't. But rather than letting their differences get them down, the team used this variety of ideas and perspectives to their advantage.

Geneva Students

"At the beginning of the fall semester, I was thinking it would take nothing short of a miracle that we would get a running car by the time they would graduate, and I still am surprised by these guys," says Che.

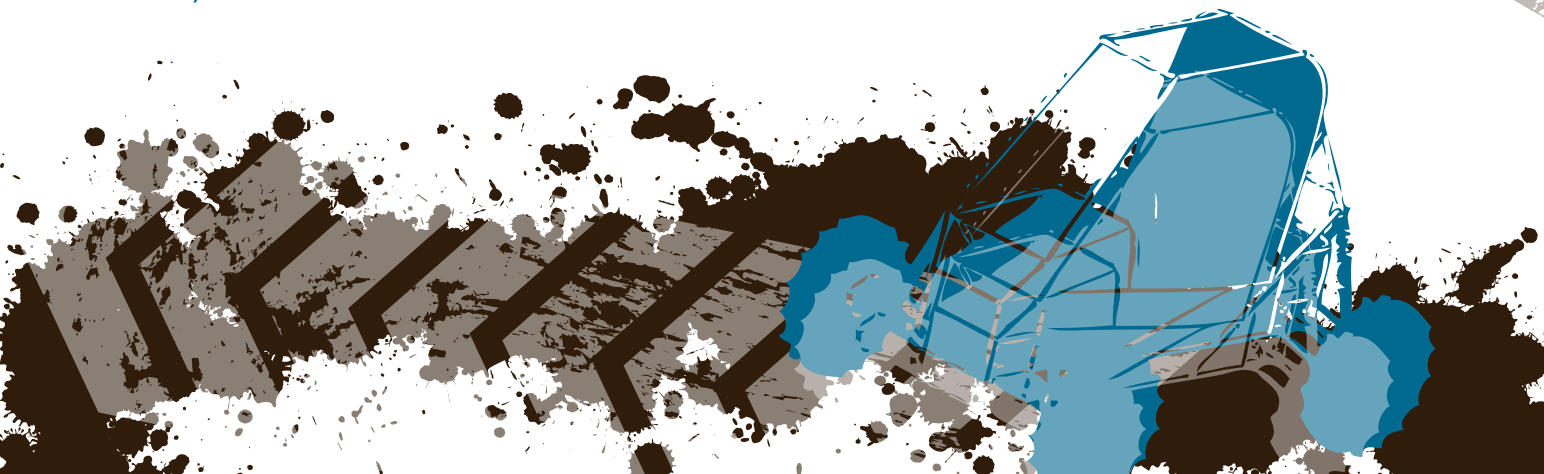
Before joining the Geneva College faculty, Che worked as a senior project engineer with General Motors Corporation in Detroit, Michigan. Out of his eight years at GM, he devoted one year to using computer models for vehicle dynamics analysis and design change recommendations. He had never worked on a vehicle for the SAE Baja Series, but he threw the idea out to some mechanical engineering students and they jumped on board.

"This is a very special group of students. I believe God just appointed this time and brought them together to get this started," he says.

"It's good to have a team," says Frank Cacciotti, "You can get five or six together and vote on it, talk about it, analyze it and decide from there. It's been pretty democratic."

As rookies in the competition, the Geneva team faced some significant disadvantages. They had to build their car — which they named the GT-1 after Geneva's Golden Tornadoes — from scratch, while experienced teams had the ability to modify their cars from the previous year. Additionally, Geneva's group of six was much smaller than many of the other teams.

They also faced the challenge of raising the \$10,000 needed to complete the project. Their biggest sponsor was the engineering department, and they also received financial support from Geneva alumni and the Geneva College Student Union.



Left to right: Nick Bloom,
Phil Ritenour, Scott Miner,
Logan Kibler, Frank Cacciotti

Go Off-Roading

"It definitely took each person's talents and ideas, God's grace and a lot of dedicated work to get to the point we did in two semesters."


Nick Bloom, electrical engineering major & team captain

Looking at the odds, financially, technically and mechanically, Frank says "we were underdogs." But he adds that it's a massive goal to finish the endurance race, a feat that only about 15 percent of cars achieve. And as Dr. Che challenged the team at their first meeting, their objective was simply to "race for Christ."

For this team of talented seniors, the project was about more than getting an A in their senior design course and competing in a prestigious competition.

"We were putting the ground work together for future teams to do a lot better, and our goal for this team was to go to the competition and to finish the events," says Nick.

They plan to come back to campus in the future to check out the GT-2, 3 and on.

"We're hoping it becomes part of the Geneva engineering tradition, especially in mechanical engineering," says Scott. 

The Car

Name: The GT-1

Weight: 475 lbs.

Top speed: 32 mph

Drive train: 10-horsepower Briggs & Stratton Intek 20 series run through a six-speed sequential-shift transmission with hand clutch

Ground clearance: 10.5 inches with a driver in the seat

Tires: 22 inches

Suspension: Full independent, double-wishbone

Hours of work: Approximately 12-18 per person per week, and often more

Fundraising: \$2,750 from alumni, businesses and friends; \$3,400 from the Geneva College Student Union; \$3,900 from the engineering department and the Pinkerton Center for Technology Development.



1. Team captain gets ready for road dynamic inspection 2. On the course 3. Walking the car to team inspection 4. Rock crawl 5. On the course 6. Celebrating the finish

The Race

Date:

May 19-22, 2010

Location:

Bellingham, Washington

Travel time:

2,573 miles (approximately 44 hours)

Toughest challenge:

Passing the technical inspection required to race. The team faced several hurdles, including adding a couple of extra frame tubes, finding new hardware and continuing to operate as a cooperative team.

Results:

Placed 55th out of 85

Sportsmanship:

"We experienced a lot of sportsmanship and friendship at the event. UNLV (University of Nevada, Las Vegas) offered their trailer to help us transport our car from the tech inspection site to a speedway a couple of miles away. Some international teams, such a team from Venezuela, came to us several times to ask for nuts and bolts, etc., and we were glad to help them." **Dr. David Che, faculty adviser**

Advice for year two:

"GT-1 was too heavy, long and narrow and didn't maneuver well enough to be a top competitor. It also had some reliability issues due to its use of non-standard fasteners. GT-2 would be well off to be lighter, shorter and wider. We also witnessed the success of cars with continuously variable transmissions (CVTs), and I would strongly advise future teams to begin experimentation with these specialized transmissions so they can be incorporated into future designs." **Nick Bloom, team captain**



2



5



6

Learning & Teaching



Hands-on experience? Check. Education? Check.

God put physics major Ed Lum exactly where he needed to be at just the right times to receive these valuable prerequisites for his future career.

Ed enlisted in the United States Air Force Reserves in his junior year of high school. Upon graduation, he entered the service as an avionics technician on cargo aircraft, where he says he learned “the basics of electronics and mechanical engineering.”

Because he was part of the reserves, he only had to be on base one weekend a month in addition to two full weeks of the year, so he had the chance to pursue higher education. He started out at the Community College of the Air Force but soon began looking to transfer.

That’s when God brought Ed to Geneva.

In the summer of 2008, Ed had the opportunity to put his Air Force experience to work for the college. Sunoco had donated an expensive instrument — an ICP-AES (Inductively Coupled Plasma Atomic Emission Spectrometer) — to the science and engineering departments of Geneva College. The faculty members were delighted, but before they could use the machine, they needed someone who could set it up. While that’s a job that usually has to be done by a technician from the manufacturer, they found someone on campus who could do it for them.

Ed’s extensive knowledge in machinery made him the perfect student to work on the newly-acquired ICP-AES, and he spent his entire summer figuring out the intricacies of the instrument.

While Ed was working on the ICP-AES, Professor of Chemistry Dr. Rodney Austin and some of his students were busy working on a project of their own. At least once a month since February 2008,



“It has been a God-given privilege to serve in the armed forces and even to be deployed, but I know that the Lord is calling me to full-time service in my career.” Ed Lum, physics major



Austin had been testing the water in a local stream for three metals: aluminum, iron and manganese. When Austin heard about the instrument, he knew exactly what he could do with it.


"It's the cutting-edge, best way to test," he says. "Normally, testing the water sample would take an extensive amount of time and man-power, but the machine makes it a lot easier."

With the ICP-AES, what would be up to a five-hour process only takes 10 minutes. And rather than testing water samples for one type of metal at a time, Austin now has the ability to test for many types at once.

The \$100,000 dollar machine uses a high-temperature torch to separate the protons and electrons from each type of metal, turning the sample into plasma. Austin can then read the amount of each metal according to the absorption of ultra-violet and visible light.

After Ed was finished with the machine, he began teaching Austin how to use it. But his involvement in the water analysis project soon expanded beyond the realm of mechanic.

"After showing Dr. Austin how to use the machine, I moved on to preparing samples for analysis, both for the machine and for the other tests that Dr. Austin performed on the water," Ed says.

Ed was deployed to Qatar in 2009, but he still kept in touch with Austin and sent him mechanical advice via e-mail. He may be graduating a little behind schedule, but his work on the ICP-AES and the water testing project have already given him a significant head-start in his pursuit of graduate school and a career in research. 



Ed Lum transferred to Geneva College in the fall of 2007, and since then, he and Geneva have made quite an impression on each other.

Ed came to Geneva solely for the education, thinking he could ignore the Christian perspective. What he didn't realize was that there was no separation between the two. One of his first classes was an introductory Bible course.

"This was where I really had my first spark from the Lord," Ed says. "I didn't quite realize at the time, but I was slowly changing."

He began a search that led him to accept Christ as his Savior, and God has given him a sense of purpose that Ed never dreamed was possible.

"Before Geneva ... I really was unsure about my future, probably because I was trying to be in control of it," Ed says. "Now coming to the Lord, I have faith about my future. It's in His hands, not mine. I feel now that I am more prepared for the future. It is through Geneva the Lord did his work on my life. No other institution would have been able to do that."

Ed returned from his tour of duty in Qatar in May 2010 and is now in a summer internship at Idaho State University, performing experiments on a nuclear reactor. He will be back at Geneva in the fall.

"It seems like a lifetime from now, but I can't wait to come back!" he says.



While Ed was deployed, he received letters and boxes of goodies from a fifth grade language arts class at Shadyside Academy in Pittsburgh. Ed sent handwritten responses back to each child — a total of 47 letters — and visited the class the day he returned to the U.S.



Portrait of a Chemist

Paul C. Cross '28 (1907-1978) was known by many titles. To Geneva College, he was a chemistry alumnus and former trustee; to Carnegie Mellon University, he was former vice president and researcher, as well as president of the Mellon Institute; to universities spanning the country — Wisconsin, Stanford, Brown, Washington — he was a researcher and teacher. To the scientific community, he was an esteemed chemist and co-author of a classic textbook on infrared spectroscopy.

But to Geneva student Katie Caldwell, he was Great-Uncle Paul.

Although Katie is just beginning to learn of her great-uncle's vast scientific contributions, he has always been remembered with respect and fondness in her household. Her mother, Cindy Caldwell, is the daughter of Cross' brother Arthur.

"My mom is really proud of her uncle," Katie smiles. And so is his alma mater.

Geneva not only gave Cross his start, but also presented him with an honorary doctorate and the Alumni Association's most distinguished award, the Life G. His portrait, along with a plaque, was mounted for the Science & Engineering building's 1970 debut and remains as an inspiration to students.



After graduating from Geneva in 1928, Cross pursued a Ph.D. in Physical Chemistry at the University of Wisconsin, where he began groundbreaking work in the early field of molecular vibrations and infrared spectroscopy under renowned chemist Farrington Daniels.

"Infrared (IR) spectroscopy uses infrared light to study the vibrations and rotations of molecules in order to analyze the molecules and determine their structure," explains Geneva professor Dr. John Stahl, chair of the chemistry department. This technique helps to "identify chemical substances and also to measure their concentration in gases, liquids or solids."

By 1933, a different type of chemistry had brought Cross back to Geneva: love. President M. M. Pearce married Cross and his college sweetheart, Sara "Sally" Groves, in Fern Cliffe, which was Pearce's home at the time and now houses faculty offices.

A few years later, Cross — with Sally and sons Carroll and Robert in tow — joined the faculty of Brown University. He began collaborating with Harvard professor E. Bright Wilson and J.C. Decius on the book *Molecular Vibrations: The Theory of Infrared and Raman Spectra* shortly before his first daughter, Beverly, was born in 1943. It was published in 1955 and is still a key resource today.

"He helped put infrared spectroscopy on a very solid theoretical foundation, and it's a technique that we use all the time, as do chemists everywhere," says Stahl.

Yet Cross' reputation for innovation and excellence had Uncle Sam ringing long before a publisher. With the advent of World War II, Cross joined the Woods Hole Oceanographic Institution to research and test underwater explosives. Leading

an outstanding science staff, he transformed a seagoing fishing boat into a floating laboratory, the *Atlantis*, and sailed into "the tongue of the ocean," a supposedly calm region between the Bahamas and Florida.


Cross finished the '40s at Brown University as chair of the chemistry department. He later transitioned to the University of Washington, where he served as an executive administrator and oversaw the chemistry, biochemistry and chemical engineering departments. But his most prominent role was as president of the Mellon Institute in 1961, and his expertise and leadership skills carried the school through a controversial merger with the Carnegie Institute of Technology.

Later, as vice president for research at the new Carnegie Mellon University, Cross' thoughts took a nostalgic turn to his old alma mater. He joined Geneva's board of trustees and served as co-chair of the development committee.

"I felt an obligation to help the institution where I had had an unusual opportunity many years before," he says.

Cross' years of hard work and perseverance earned him the Pittsburgh Section American Chemical Society Award in 1971. And over 30 years after his death in 1978, his body of work continues to influence new generations of scientists.

Katie walks past her great-uncle's portrait in S&E on her way to class, just like her father, biology grad Terrence Caldwell '71, did before her. And while she doesn't encounter much of Cross' work in her pursuit of a civil engineering degree, she is inspired by his achievements and integrity.

She has joined a rather large club. 



Taking Responsibility

A dark blue ribbon for energy, a light blue ribbon for water. These are the tokens Geneva students, faculty and staff received when they made the Creation Stewardship Club's Water and Power Pledge this spring.

"People sign up to say, yes, I pledge to conserve and do better than I usually do, and then they get their ribbon to proudly wear," says biology professor Marjory Tobias '94.

As founder and faculty adviser for the Creation Stewardship Club, Tobias hopes this is a movement that will take hold on Geneva's campus. Every couple of weeks, Geneva's physical plant monitored residence halls and other campus buildings for decreased water and energy usage. They sent the data to club members and a student from Tobias' environmental science class who then graphed and publicized the results.

"When we care for the environment, we're meeting the needs of other people too."

"We can all have a profound effect on how much energy and water we use in the course of the day," says Jeff Lydic, director of physical plant. "If we take just a little time to think about what we are doing, we can easily use only what we need."

The Water and Power Pledge isn't the Creation Stewardship Club's first campus campaign. Under Tobias' leadership, the group led the college in a nationwide recycling competition last year called Recyclemania. Since then, a burgeoning number of recycling receptacles have been placed across campus, and tips for recycling everything from batteries to computer monitors are now available on Geneva's website.

Left to right: Marjory Tobias with Creation Stewardship Club officers Josh Andre, Joanna Peter and Matt Cesare.

"The challenge is getting it to be part of the culture — that this is what we do, and we care about it without being told to," Tobias says.


Tobias teaches a class on environmental stewardship, and as she educates her students on the different areas of creation care, she encourages them to think about the job God originally gave to mankind.

"In Genesis 2:15, when God puts Adam and Eve in the garden, He tells them to cultivate and keep it," she explains. "Depending on the translation, sometimes it says 'take care of,' and if you look at the original Hebrew words that were used, the word translated 'cultivate' means 'to serve.' So from the very beginning, God has put us in a position of responsibility to care for the creation. And when we care for the environment, we're meeting the needs of other people, too."

Tobias was introduced to the idea of creation care as a biology student at Geneva, sitting in ecology, botany and environmental biology classes taught by late biology professor Dr. John Cruzan. Her interest became a passion when she took summer classes at the Au Sable Institute of Environmental Studies. Geneva has a partnership with Au Sable that allows students to learn more about creation in the context of a Christian community focused on stewardship.

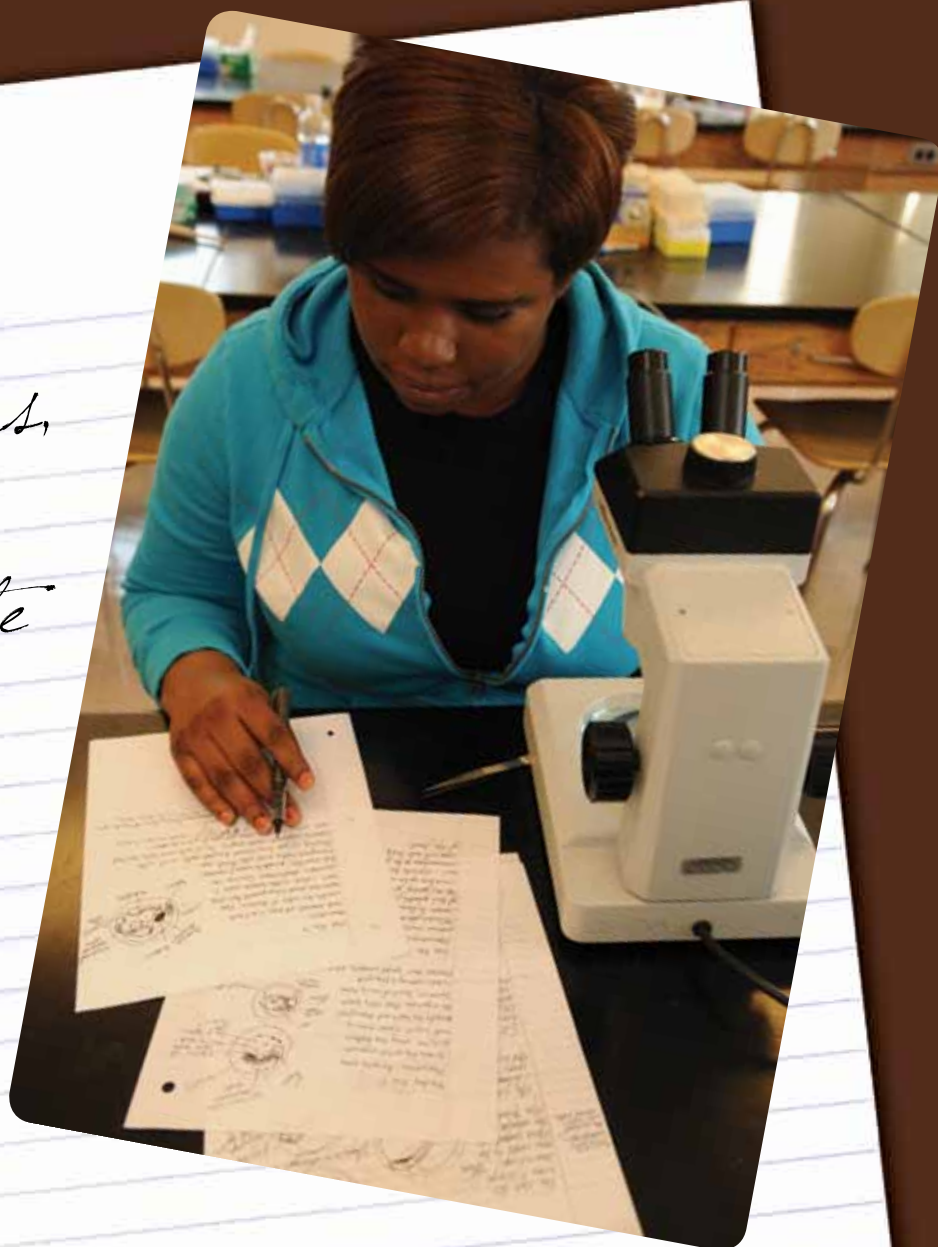
"It's been a process from then on of trying to teach other people those things and trying to be a better steward in my own life, too," Tobias says.

Whether it's taking shorter showers or turning out the lights before leaving for class, Tobias wants her students to understand that every choice is significant.

"If we all just don't care and say we don't make a difference, then we're all just going to keep not making a difference." 



"...developing
servant-leaders,
transforming
society for the
kingdom of
Christ."



The Geneva Fund supports academics, student programs, financial aid and more — impacting every area of life and learning at the college. Most importantly, the flexibility of these gifts enables the Geneva Fund to meet needs as they arise.

With a donation of any amount, you can build a stronger future for our students. Contact the Office of Institutional Advancement at 724.847.6516 or visit www.geneva.edu/geneva_fund.

The Geneva Fund

Grad School Success

The academic excellence of any undergraduate program is put to the test when students go on to pursue graduate-level education, but Geneva's STEM majors continue to pass with flying colors. In addition to the rigorous standards set by each department, the learning experience is enhanced by small classes and individual attention from professors.

"Most summers, at least one of the biology department faculty is directing one or two students in full-time research," says Professor of Biology Dr. Daryl Sas. "Our students have also been very successful obtaining summer research internships at research universities because of our emphasis on modern biology."

"My education at Geneva has made me both a better Christian and scientist and has given me a fundamental understanding of how the two intertwine."

Gabe Graffius '07, Ph.D. in Chemistry, Seton Hall University

"I was so prepared for medical school. The coursework that I had done at Geneva overlapped with much of the work I had during the first year."

Gayle Murray '01, pediatric hematology and oncology fellow, Washington University in St. Louis

Geneva also offers a fully accredited engineering program; a chemistry department that has been approved by the American Chemical Society since 1958; and math, physics and computer science programs committed to cross-disciplinary problem-solving. But perhaps most importantly, Geneva gives students a Christ-centered perspective on their disciplines and their future careers.

"I think it is very significant that most of our students who go on to graduate school have a high level of motivation to do well," Professor of Chemistry Dr. John Stahl says. "And that is in no small part due to our emphasis on science as a calling in God's kingdom work."

JOHN KINYANJUI '99

Majors: Chemistry and Chemical Engineering

John Kinyanjui came to Geneva College from Kenya with the hope of eventually returning home and using his education to help his country. His experience at Geneva gave him the academic preparation, as well as the spiritual guidance, to make his dream a reality. He even found a home away from home with the family of chemistry professor Dr. John Stahl.

After college, John worked at a nuclear services company before pursuing a graduate degree at the University of Nevada at Las Vegas. He is now working as a post-doctoral scholar in the area of radiochemistry. John is also using his work to impact the nation of Kenya. He and others have recently registered a non-governmental organization (NGO) called Missionary Village Aid Kenya to facilitate missionary work in nomadic communities.



GABE GRAFFIUS '07

Major: Chemistry

After graduating from Geneva, Gabe accepted a position as an analytical chemist at Merck & Co., working in late-stage pharmaceutical development. He is also pursuing his Ph.D. in Chemistry at Seton Hall

University on a part-time basis. Geneva's entire chemistry department helped to prepare him for these challenges, and his summer research with Dr. Rodney Austin was especially valuable.

Like many other Christians in the sciences, Gabe struggles with the rift between faith and his field. But his experience at Geneva prepared him to face those challenges and bridge the gap.

"I have been asked many times, 'How can you be a scientist and a Christian?'" he says. "And I can say with certainty that my education at Geneva has made me both a better Christian and scientist and has given me a fundamental understanding of how the two intertwine."



**STEPHANIE
(HARWOOD '06) POE**
Majors: Biology and Chemistry

Stephanie Poe went straight from Geneva into a doctoral program at the University of Pittsburgh School of Medicine and later chose to join its immunology training program, which will enable her to earn a Ph.D. in Biomedical Research in the field of immunology.

Professor of Biology Dr. Daryl Sas was Stephanie's academic adviser and immunology professor at Geneva. In and outside of class, he challenged her to develop the skills and understanding necessary for a career in research. But Geneva gave Stephanie more than academic preparation. She learned to see the beauty and order of the Creator in every aspect of the scientific world.

"If I didn't think that the way a cell develops is consistent and has a purpose, I couldn't perform my experiments the way that I do," she says.



ROSANNE MARTYR '06

Major: Civil Engineering
Minor: Applied Mathematics

As an engineering student at Geneva, Rosanne wanted to go into geo-technical work and did her senior design project on soil remediation. But God wanted her to switch gears from land to water, and now she is at the University of Notre Dame earning her Ph.D. in Civil Engineering and conducting research in storm surge modeling.

Rosanne has always been interested in environmental issues, and she appreciates the way Geneva's engineering professors engaged students in the idea of faithful living in all aspects of life.

"Storm surge modeling directly impacts where and how levees are rebuilt in places like New Orleans," she says. "I am driven to do good research because of its direct impact on this construction, which greatly affects the more vulnerable in our societies."



JOHN NEISWINGER '07
Major: Chemistry
Minors: Biology and Mathematics

"The scientific community is full of people who are striving to prove the non-existence of God," John says, "but I have learned that delving into the science of life not only points to an intelligent Designer, but gives me a reason to keep unraveling the world that He has created, in order that He may be glorified."

John is now a third-year Ph.D. student at Johns Hopkins Medical School in the Department of Pharmacology. In applying to graduate school, he had to compete with students from Yale, Harvard, Berkeley and other big-name schools. He was concerned that a degree from a small, liberal arts college would affect his chances, but he soon realized how far that was from the truth.

"Scholastically, Geneva prepared me very well not only for the qualifying exams to get into graduate school, but for graduate coursework as well," he says.



GAYLE MURRAY '01

Majors: Chemistry and Biology
Minors: Mathematics and Philosophy

"I was so prepared for medical school," says Gayle. "The coursework that I had done at Geneva overlapped with much of the work I had during the first year of medical school."

Gayle attended Upstate Medical University in Syracuse, New York, then completed a pediatric residency at Wake Forest University in Winston-Salem, North Carolina. After spending six weeks doing medical missions in Uganda, she accepted a position as a pediatric hospitalist at the University of Texas Southwestern in Dallas. She is now a pediatric hematology and oncology fellow at Washington University in St. Louis, Missouri.

Gayle's faith has been an extremely important part of her career. "It is such an integral part of your life as a whole," she says. "I felt called to be a physician, and I have found that I have gifts that have flourished in this field."



A HIGH CALLING

“Doc was such a great example in so many ways — his humble, tireless service, his sincere love for his students and his work, his patient endurance in trials. Scripture speaks of those ‘who by patient continuance in doing good seek for glory, honor, and immortality.’ Doc never sought those things on earth, but by God’s grace, he’s received them where it matters.” Matt Gatchell ’93, electrical engineering

These words have been echoed by countless students, faculty, staff and alumni at Geneva College since Professor of Electrical Engineering Dr. Jack Pinkerton passed away in May 2009. A man of humility, kindness, endless generosity, humor and unmitigated commitment to his field, he left his mark on the hearts and lives of the college community and many outside of it. But those who knew Jack know that he would never call it “his mark.” He would call it what it truly was — the mark of His Lord and Savior Jesus Christ.

A 1960 physics graduate of Geneva College, Pinkerton returned to teach after earning his doctorate from the University of South Carolina. Over the next four decades, he made contribution after contribution to the college and the students he loved. He was instrumental in establishing the college’s electrical engineering major, recruiting as well as teaching for the program. He developed a highly successful relationship between Geneva’s engineering department and the U.S. Bureau of Mines, a collaboration that became the impetus for his greatest legacy at the college: The Center for Technology Development.

“Doc” believed in research and design projects that would make an impact, both in the world and in the lives of students. That is why, in 1973, he jumped on an opportunity to partner with the Bureau in developing

a Coal Dust Explosibility Meter (CDEM). This potentially life-saving device would measure levels of combustible coal and rock particles in mines to prevent explosions and fatalities. The CDEM also provided research opportunities for Geneva students for the next three decades.

Pinkerton’s partnership with the Bureau attracted attention from both local and national agencies. The Ben Franklin Technology Center approached him in 1988 with a grant opportunity that would allow him to help under-resourced businesses and entrepreneurs in the community to develop their ideas and design promising products. It was this grant that enabled Pinkerton to make the Geneva College Center for Technology Development (GCCTD) a reality. The center worked on 25 projects in 1989 and has come alongside countless local companies and individuals since then.

In addition to his responsibilities as a professor and as director of the GCCTD, Doc oversaw Geneva’s technology services department. In the early 1990s, he teamed up with director of tech services Joe Hines ’86 and Geneva engineer David Clark ’89 to install the information infrastructure that would connect Geneva to the Internet. It was a tremendous undertaking — the initial funding came almost entirely through grants that Doc co-wrote with Provost Jim Boelkins — and saved the college millions of dollars.



In addition to his work at Geneva, Pinkerton served as a research physicist for the National Institute of Occupational Safety and Health; the Department of Energy; and the U.S. Bureau of Mines. He was also a NASA-ASEE summer faculty fellow in network engineering at the Jet Propulsion Lab in Pasadena, Ca.

“The Lord has called me to be here, so I view my work as a calling, not just a job.”



Doc's love for people extended far beyond the campus community. He and his wife, Janet, cared for over 50 foster children, and one of them became their adopted daughter, Jenny.


“Hard work was in Pinkerton’s blood,” says Dr. Jim Gidley, chair of the engineering department. “He got the job done.”

But no matter how much Doc had to do, he always took time for his students — joking with them, inviting them to his home for dinner and giving them a vision for what their work was really about.

Pinkerton’s students recognized his commitment in 1987 with the Teacher of the Year Award, and his colleagues honored him with the Excellence in Scholarship Award in both 1993 and 1998. He received a number of other awards throughout his career, but accolades didn’t mean much to him. He was just doing the work his Master had given him.

“The Lord has called me to be here, so I view my work as a calling, not just a job,” he once said.

Doc carried heavy burdens, both physical and personal, throughout his life, but he never complained or allowed them to interfere with his work. He never stopped giving, and he never stopped serving. Even as he lay in the hospital in the last days of his life, he was grading papers so that his engineering students could graduate. His passing has left a hole in the Geneva College community, but his memory will continue to inspire us — to excellence, humility and love.

“Jack loved his students and his colleagues,” Dr. Gidley said at his memorial service. “He was not highly demonstrative or vocal about it. He showed it. That’s the way it is with engineers; we show our love by working hard and serving together to reach a common goal. Jack was a superlative example of that way of life ... He loved us, and we loved him.” 

Left to right: Electrical engineering student Bill Lang, David Clark, Dr. James Gidley, and Dr. David Che. Che, associate professor of mechanical engineering, is continuing Doc's vision as interim director of what is now the Pinkerton Center for Technology Development.



in service

OUR PEOPLE

The Mind of Christ



From the time he was young, Calvin Henderson had a recurring dream. Standing on a brick pathway bordered by a low brick wall, he would find himself looking up at the back of a large building. He would walk up the steps to an office with a black counter. Then he'd wake up. He had no idea where this building was, but he knew it had to mean something.

Calvin was born and raised in South Carolina when racial tension was a way of life. He left for Vietnam in the late '60s, and when he came home a year later, he thought he might be treated like an equal citizen. He wasn't. Angry and disappointed, he decided to move north.

That anger had a tight grip on Calvin's heart for a long time. But in the mid-1980s, after he was married and had been living in Pennsylvania for about 15 years, he gave his life to Christ. That didn't mean the bitterness was gone, but things were different. He wanted to live for something bigger than himself.

One day, a good friend asked Calvin if he would be interested in a custodial position at Geneva College. Calvin called immediately and was invited to come to campus for an interview. Afterwards, as he and the director of physical plant were walking from the Student Center to Old Main, Calvin saw something that stopped him in his tracks. It was the building from his dream. The brick, the color — everything was the same.

“I knew without a doubt

"I'm telling you, it was strange, but I was thinking, 'this is it!' I knew without a doubt that this is where I was supposed to be," he says.

But Calvin soon found that his new job at Geneva was not exactly the stuff of visions. The pay was lower than he'd hoped, and wages were frozen for several years. He was already serving as an assistant minister at his church, but he took on a part-time job at a grocery store. Calvin just didn't understand what God was trying to teach him.

The tension came to a head late one evening when he was cleaning Geneva's Science & Engineering building. As he was getting ready to leave, he turned around and saw liquids spilling from the garbage bags he was carrying.

"I began screaming and yelling at God. I said, 'I'm sick and tired of cleaning up other peoples' mess. Ministers and janitors have one thing in common: they get no respect and no consideration.'"

Then Calvin says that God answered him, as only God can, by taking him straight to Philippians 2. "It says that Jesus, although He was God, came down and became as a servant and became obedient, even unto death on the cross. A servant. Then he was exalted. And that became a reality for me right there in the hallway. That's when God said, 'Let this mind be in you that was in Christ Jesus.'"

From that moment on, Calvin was no longer a janitor. He was a servant. He volunteered to clean the freshmen men's residence hall, and that job developed into a two-year ministry in the lives of the students who lived there. Calvin also began taking classes. He is now a student in the Bridge Program, which will enable him to earn enough credits to enter the human services major in Geneva's Adult Degree Completion Program. And as if school and a full-time job weren't enough, he also serves as the president of his workers union and recently became the senior pastor of his church — an all-white congregation.

When Calvin's dream became a reality that first day on campus, he had no idea just how great God's plans for him were. He had no idea how God would use all those times of struggle to transform his life of resentment into one of leadership, service and love.

"When things seemed hard, when there was financial struggle and I was unhappy, I think it was a time of testing," he says. "I'm glad I stayed, because now I feel as if I've made an investment here at Geneva. I feel like a part of this college. These students here have a passion for Christ that I didn't have when I was their age. I've had a part in their lives while they were here, and they are going out into the world to make an impact for Christ as servant-leaders. That's awesome."

that this was where I was supposed to be."

CALVIN HENDERSON

Just Listen



As an elementary education major at Geneva College, Robin Miller '87 never dreamed that God could be preparing her to become a bereavement counselor at Thompson-Miller Funeral Home. Neither could she have imagined who her closest co-worker would be.

O'Shea is a facility dog trained by Canine Companions for Independence (CCI). Part golden retriever and part lab, she is one of thousands of dogs bred and raised to serve as skilled companions, service, hearing or facility dogs. O'Shea's job at the funeral home is to calm and comfort those who are grieving.

Robin had been teaching for three years when she decided to join the funeral home owned and operated by her family. She wasn't sure of the role God wanted her to take, but at the encouragement of her dad, she earned her certificate in death and grief studies from Colorado State University. That's when everything seemed to fall into place.

Robin's ministry, Someone's Caring, offers bereavement support groups, including one for suicide survivors and

another for parents who have lost a child. Her teaching ability and servant's heart, developed during her years at Geneva, enable her to touch the lives of funeral home clients and community members.

Robin learned about facility dogs through her brother, Glenn. The Millers began the application process in October 2006 and prepared for a lengthy wait, possibly as long as two years. Two months later, CCI had a dog for them.

Robin quickly discovered how O'Shea could be used to serve in the funeral home. The family of a young man who had been killed in a car accident was spending a few hours in the funeral home before visitation. Robin knelt before the man's fiancée, and as they talked, the woman stopped abruptly and said, "Oh my, I don't even like dogs!"

She had just realized she was stroking O'Shea's head as she shared her grief with Robin. It became clear that O'Shea had a unique ability to sense pain and offer comfort.

Sometimes Robin and O'Shea join families during visitations, and at other times, O'Shea plays quietly with children in another room. She mingles with guests, offering peppermints from a basket she carries gently in her mouth. She often joins family members during funeral services, lying quietly at their feet until Robin comes for her at the end of the service. Many tears have spilled onto O'Shea's thick golden coat.

O'Shea has been working with Robin for four years and has no plans to retire anytime soon. When that time comes, though, CCI will either place her for adoption or allow her to stay with Robin and her family. But as Robin says with a smile, "There is no option. She stays."

O'Shea has a unique ability to sense pain and offer comfort.

ROBIN MILLER

No Easy Answers



A 2002 graduate of Geneva College, Sarah Carleton is the oldest of eight kids, five of whom came into her family through adoption. Micah, Elisha and Arianna were adopted as babies, and Abel and Sombre joined the Carleton family from Ethiopia at the ages of eight and four. Growing up with siblings of difference races, Sarah began wrestling with questions of race and identity at a fairly young age.

"The adoption world is really complex. and it doesn't have these easy answers," she says. "And when you add in other layers of transracial adoption or international adoption, it adds even more to it."

One of the means Sarah uses to ask these questions and unwrap their multi-layered implications is through acting and dance.

"When I'm dealing with really complex not-easy-answer worlds, dance makes the most sense to me because I feel like it gives room for a lot of that complexity," she says.

Geneva College offered limited opportunities when it came to the performing arts, but the people Sarah met at Geneva had a profound impact on her life and her way of thinking.

"The college years were a time when I developed how to analyze and ask questions and think critically," she says. "Having people who encouraged me to ask questions and valued me as a whole person was really significant for me."

A few years after graduation, Sarah decided to pursue professional training in performance. She started auditioning for grad schools, and the University of Louisville in Kentucky offered her a position in their Master of Fine Arts in Performance program. Sarah was in her element, and the more she learned, the more she felt like this was the way God wanted her to share the stories closest to her heart — stories about her siblings and the beauty and complexity of adoption.

After she received her degree, Sarah moved back to Pennsylvania to be with her family and teach in Geneva's communication department. She also began working on a very special project: a one-woman show entitled *Portrait of a Family*.

As she worked on the storyline, choreography and many other pieces of her performance, Sarah shared her thoughts and experiences on her blog. One day, she received a message from Rhonda Rhoorda, adoptee and co-author of *In Their Own Voices*, a series of books on transracial adoption. Rhonda offered to come to Geneva's campus to speak, and together, she and Sarah decided to create a day-long campus event called "The New American Mosaic: Creating Families Through Transracial Adoption." The event was held at Geneva on Saturday, March 13, 2010.



SARAH CARLETON

A Love for *Art*, a Love for *Each*

Dr. Vivian (Davidson '43) Hewitt and her late husband, John, commemorated life's celebrations and milestones in a unique way: they purchased art.

After their wedding in 1949, they used monetary gifts to bolster their art collection, not to buy furniture or culinary gadgets. Their honeymoon consisted of visits to the Metropolitan Museum of Art, the Museum of Modern Art and the Whitney Museum of American Art, all in New York City.

Vivian and John also used art to celebrate holidays and other special occasions. They gave each other paintings and prints on Mother's Day, Father's Day, Valentine's Day and birthdays, and they jointly purchased a bigger piece for the house each Christmas.

"Over the years, if you add five or six paintings a year, your collection grows," Vivian says.



More than half a century later, many of these pieces compose the Hewitt Collection of African-American Art, now housed at the Harvey B. Gantt Center for African-American Arts and Culture in Charlotte, North Carolina. The collection is considered one of the most comprehensive and significant anthologies of artwork produced by artists of color during the 20th century.

The Hewitts decided to focus on collecting African-American art in the 1960s. The works in their collection present a glimpse of this vibrant art community and the society in which the artists lived. Many pieces reflect the importance of community and family, as well as some of the harsher realities of life during the Civil Rights era in America.

As Vivian and John embraced the art, they also welcomed the artists. They hosted parties and functions in their Upper West Side home, honoring and supporting the creators of the pieces they collected. To this day, Vivian is still in contact with several of the artists whose work is included in the Hewitt Collection.

The Hewitts were not wealthy, but that didn't mean they couldn't invest in what was important to them.

"You really don't have to be wealthy to collect good art," Vivian says. "Sometimes we bought it directly from artists and sometimes from galleries, and we always tried to support local artists. But the main thing is, buy what you love."

Vivian and her husband generously donated more than 40

Other



Vivian HEWITT

works of art to Geneva College that now adorn spaces in McCartney Library, Alexander Hall and various faculty and staff offices on campus. Twelve of these pieces make up a collection of Haitian art that the Hewitts began compiling after a trip to the country in 1960. Vivian cited Geneva's interest in mission work in Haiti as her impetus for bestowing the treasured pieces to the college.

Vivian, a native of New Castle, Pennsylvania, graduated from Geneva College in 1943 with degrees in psychology and French. She says that Geneva accepted and supported her as a minority student and believes that this support "provided the spark of confidence to write creatively and speak publicly" that enabled her to reach her full potential as an individual and as a professional.

Her career as a special librarian and educator can be traced back to Geneva's own McCartney Library, where she worked for four years as a student. As her duties increased, so did her interest in library science. She continued her education at the Carnegie Institute of Technology (now Carnegie Mellon University).

During her 40-year tenure as a distinguished librarian, Vivian has served at the Carnegie Library of Pittsburgh, the

Rockefeller Foundation and the Carnegie Endowment for International Peace. Earlier in her career, she was a faculty member at the Graduate Library School, University of Texas and the Graduate School of Library and Information Science at Atlanta University. She was awarded with an honorary doctorate from Geneva College in 1978.

A generous supporter of Christian education at Geneva, Vivian is part of the President's Council, a core group of donors who contribute annual leadership-level gifts. She is also a member of the Heritage Society and the Tower Society.

Vivian and John spent 50 happy years together. Vivian now lives in a brownstone home in Manhattan and is an active member of the Cathedral Church of Saint John the Divine. She is working with an oral historian to complete her memoirs.

Ernest Crichlow, Waiting, ca. 1965
©Ernest Crichlow

Jonathan Green, Easter, 1989
©2008 Jonathan Green

Printed with permission of the Harvey B. Gantt Center for African-American Arts & Culture.

Undated Hawaiian folk art on Tapa cloth. The Vivian Davidson Hewitt Collection, Geneva College

in conclusion

BY BEKAH GUTHRIE '10

Joshua Guthrie '08 (1981 – 2010)

You may not remember meeting him, but at one point or another, you most likely ran into my brother, Josh Guthrie, at Geneva College. It may have been at Kairette or Upper Room; a football game or student event. Maybe you saw him let the squirrel loose in Alex's or rappel off the back of the Student Center (those were the good old days). If you do remember Josh, you probably remember his laugh, his smile or the vivacious energy he always had. You may remember his intense love for airplanes or his passion for using them on the mission field. Maybe you remember his Story; maybe he shared his Dream with you.

My brother's story is one of struggle and God's incredible providence. His life inspiration came when he read *Jungle Pilot*, the story of five missionaries who gave up their lives to bring the gospel to a violent tribe hidden deep in the jungles of Ecuador. Josh's love of planes, people and Christ were melded together. That's when he knew — he was called to be a missionary pilot.

But in the midst of his nine-year journey to prepare to fly into remote areas, Josh noticed a rapid muscle loss in his left hand. Preliminary indicators said that Josh had ALS, a horrifying debilitating disease that takes the lives of young and old, often in a matter of months. We got on our knees and prayed. The doctors could never say why the deterioration stopped, but we all knew that God had worked a miracle and given Josh back to us.

Josh's story comes full circle. This past January, he finally got the opportunity to complete his last stage of training. He began flying with I-TEC, the organization begun by the son of one of the five missionaries killed in Ecuador. Josh was all excitement and enthusiasm. The hand of God was at work in his life.

It was on Sunday, April 18, during a routine flight that Josh's plane crashed, killing him instantly.

So many people have said to me, "I don't understand this. Why now? Why would God take a young man just starting out in his dream?" I'll tell you what Josh would say, and I know, because God let us face this when we thought we would lose Josh to disease. He'd say, "Don't take me when I'm old and sick. Don't take me slowly, when I'm doing nothing for the Kingdom. Take me when I'm at the top. Take me when I'm on fire for Christ."

Josh wasn't on his way to becoming a missionary; he was a missionary already. He was at the height of his dedication and devotion to doing God's work. Shouldn't we all want to meet the Lord like that?

DISCOVER ROME



GENEVA COLLEGE *Semester in Rome*

Students delve into the roots of the Western tradition by making Rome and much of Italy their classroom. Taught and overseen by Geneva faculty, this integrated humanities program explores the foundations of Christianity, the arts, history, literature and philosophy.

The Semester in Rome program is open to students from Geneva College, schools in the Council for Christian Colleges and Universities (CCCCU), and to Christian students from other institutions.

rome@geneva.edu • www.geneva.edu/object/rome • 724.847.6757



GENEVA COLLEGE
3200 College Avenue
Beaver Falls, PA 15010

Non-Profit
Organization
U.S. Postage

PAID
Beaver Falls, PA
Permit No. 16

One magazine. ALL ALUMNI.

We want to celebrate what God is doing in your life, and we believe the best way to do that is by sharing all your stories, news and announcements in one publication. Starting with the Fall/Winter 2010 issue, *Geneva Magazine* will include the alumni class notes that have previously been printed in *Geneva Family Matters*. By merging these publications, we are consolidating costs, which allows us to send the magazine to all Geneva alumni, as well as to donors and parents.

We hope you enjoyed reading the stories in this issue, and we look forward to sharing more in the months and years to come.

You can e-mail your news, photos* and story ideas to editor@geneva.edu, or send them to:

Geneva College
Public Relations Office
3200 College Avenue
Beaver Falls, PA 15010

*Former Geneva
College president
Joe McFarland skydiving
on his 80th birthday.*

*Electronic photos must be high-resolution
JPEG files (at least three megapixels or 300 dpi).

