TheSower



Thessalonica Agricultural & Industrial Institute
Tax ID/EIN: 13-1624206
Issue 179, Spring 2019



BSc candidates from the Food Science & Technology program study topics related to the Mediterranean diet alongside Professor Tryphon Adamidis. Full story on page 4.

Published semi-annually for friends and contributors to the American Farm School.

Chairman

David G. Acker

First Vice Chair

Frances Manthos

Vice Chairmen

George Milonas William A. Tsacalis

Secretary

Sophia S. Hartch

Treasurer

Constantine N. Darras

Trustees Deborah Androus William J. Bennington John R. Crunkilton Joannie C. Danielides Kim E. Doolev Thymis Efthymiadis Christos S. Folias Seth E. Frank Perry A. Gotsis Constantinos Hadjiyannakis Barbara K. Heming Stephen King Vicki Kyriakos Annie Levis

Thanassis Martinos

Daniel M. Morgan Flaine K. Nelson

Stefanos Panteliades

Nikolaos Pentzos

Joel S. Post

William L. Richter

Peter H. Schube

Manita S. Scocimara

Susan L. Stupin

Robert W. Uek

Sharon W. Vaino

Theodora Valentis

Panayotis P. Yatagantzidis

Honorary Trustees

Antonis Anezinis

Sheila Baird

Peter Bien John H. Cleave

Stavros Constantinides

Phillip G. Foote

Dimitri Gondicas

Edmund Keeley

John C. Lycouris

Pantelis Panteliades

Anastasia Pappas

Aliki Perroti

George B. Post

Gail D. Schoppert

Judson R. Shaver

Charles L. Thomas, Jr.

President

Panos Kanellis

Sower Editor

Maggie Luttrell Outsios

Design & Printing

Alternative Graphic Solutions, Inc.

From the President

s we prepare for the onset of Spring - a time of new beginnings in nature - we welcome several new beginnings for our Institution as well. Throughout campus and across educational divisions, faculty and staff work tirelessly to enrich programs and provide the most current tools and the most valuable experiences to our students.

After 23 years of service, Perrotis College continues to lead collaborative projects to bring forth advances in the agri-food sector. Students and faculty engage in many areas of research

including trending topics in the sector; from the benefits of the Mediterranean diet, to alternative uses for waste and by-products, they work together to find environmentally and fiscally sustainable solutions to real-world issues faced in agricultural production.

> Throughout campus and across educational divisions, faculty and staff work tirelessly to enrich programs and provide the most current tools and the most valuable experiences to our students.

The High Schools and Study USA program continue to foster the development of exceptional students, who go on to pursue their undergraduate degrees in Greece and the United States. High school alumni Lutfie Gjurra and Eirini Symeonidou discuss their impressive journeys from AFS freshmen to dynamic young women following their dreams at top US institutions. Maureen Mukuba, in her first year at Perrotis College through the Camp to Campus program, shares her experience to date, while Perrotis College graduates Eva Kalaitzidou and Irenaeus Georgiou, both now completing degrees at the Perrotis College School of Graduate Studies, touch on the importance of their Perrotis roots.

In preparation to receive its first class of 7th graders in September 2019, construction of the Vasilios S. and Aphrodite B. Haseotes Middle School began over the summer. The brand new building will feature state-of-the-art classrooms and a variety of cutting-edge laboratories, facilitating the development of critical thinking and STEM skills. The fully refurbished auditorium will provide a versatile focal point for campus-wide events.

I would like to take this opportunity to thank you, our supporters, for your important assistance. Your support makes it possible for us to offer our signature educational experience to promising new students who will go on to fulfilling and successful careers while contributing to beneficial change in the world. Thank you for believing in our mission.

Sincerely,

Panos Kanellis, Ph

President

American Farm School & Perrotis College

Food and Agricultural Waste Recycling: Closing the Nutrient Loop Through Composting

Dr. Christos Vasilikiotis, Chair of the Perrotis College Agro-Environmental Systems Management Program, is investigating innovative methods for managing agricultural waste. By applying the concepts of circular agriculture and optimizing the use of biomass to conserve energy and other resources, the aim is to minimize the negative impact of farming practices on the environment and climate. Converting the waste products from agriculture and food processing to renewable sources of plant nutrients minimizes nutrient losses and reduces the need for inputs such as chemical fertilizers. Circular agriculture has the added benefit of increasing soil biodiversity through ecological practices such as crop rotation. Rotating in leguminous crops for instance, aids in the breakdown of nitrogen in the air into nitrates and nitrites, which provide nutrients to the plant and helps soil regain its fertility. Yield can also be optimized through the use of cover crops and the application of precision agriculture.

Over the past five years, Dr. Vasilikiotis has developed and adapted this methodology with students from the undergraduate program, keeping applications relevant to Greek farmers and their needs, by using vermicomposting (a composting process that uses earthworms to process and convert waste into a high quality soil amendment and fertilizer). Some of the most interesting applications to date include the development of a vermicomposting system that can convert the



solid waste generated from olive oil production (specifically from two-phase olive oil mills), which, owing to its very high acidity and toxicity, is highly unsuitable for direct re-integration into the soil if untreated. To address growing levels of urban household waste, Dr. Vasilikiotis is studying the use of small vermicomposting units that can fit any balcony or garden, thereby helping to divert a large portion of municipal organic waste from landfills. A collaboration with local municipalities to implement a vermicomposting program for city residents is underway.

Postgraduate Programs - Turning the Focus on Food



The MSc programs at Perrotis College School of Graduate Studies welcomed their second cohort of students for the 2018-2019 academic year in the departments of New Food Product & Businesses Development and Marketing for the Agri-Food Sector. The postgraduate programs place their emphasis on the technologies that are now defining the field worldwide; making sure to expose students to rapidly growing areas of study such as new materials, digital technology, genomics and bioinformatics as they apply to the environment, agricultural and life sciences. The programs are hands-on and research-based, with small class sizes ensuring a more intensive exposure to the teaching faculty, labs, technology hubs, and other resources.

Several innovative projects are currently underway in the School of Graduate Studies, including one focused on Greek table olives that are produced by a natural fermentation process. The fermentation is carried out by microorganisms that shape olive organoleptic characteristics

produce metabolites associated with beneficial health effects. Innovative genomics technologies enable identification of each microorganism that contributes to fermentation through DNA sequencing. These efforts are important for the mapping and characterization of microbiota diversity in Greek fermented table olives, singling out unique strains of microorganisms likely to be associated with the particular geographic location of the olive groves, as well as the cultivation practices employed. This knowledge will enable producers to create optimum fermentation conditions resulting in stronger organoleptic characteristics, thus increasing their nutritional and economic value.

Another noteworthy research project has revealed alternate uses for pomegranate husks. Pomegranates are a popular fruit worldwide and approximately 500 grams per kilogram of the fruit is comprised of an inedible husk which is discarded as agrowaste. In light of increased environmental regarding over-production concerns of food by-products, together with the growing demand from the food sector for the use of natural ingredients, students from the New Food Product and Business Development program used powder derived from pomegranate husks as an alternative antioxidant and coloring agent in meat.



Mediterranean Diet Under the Perrotis College Microscope



The Mediterranean diet is one of the healthiest in the world and encourages the consumption of plant-based meals, with just small amounts of lean meat and chicken complementing larger servings of vegetables, fruits, legumes, unrefined grains, olive oil and fish. It has been found to reduce cardiovascular disease, cancer risk, hypertension, type 2 diabetes, metabolic syndrome, neurological diseases such as Parkinson's and Alzheimer's, and many other western-lifestyle diseases.

A team of undergraduate students from Perrotis College have been studying the importance of the Mediterranean diet, specifically focusing on the traditional Greek spoon sweet. Under the supervision of Food Science & Technology department Professor, Tryphon Adamidis, the team discovered that the sweets, in this case wild cherry, maintain fairly large quantities of their antioxidants, confirming that despite being boiled in sugar syrup, they do not lose valuable nutrients.

"Because of the sugar, many people don't like the sweet. We wanted to investigate whether any of the nutritional value of the fruit remains after such treatment, or if we're just consuming sugar without value," says Dr. Adamidis. Laboratory analysis revealed that the cherries, despite processing, retained 80% of the polyphenols and 50% of the flavonoids compared to fresh fruit, suggesting that the traditional sweet is a healthier alternative



than most dessert options. As these are early results, the team will continue with a new round of research, this time with apples.

Spoon sweets are very popular in Greece, with each region having its own specialty, usually related to the specific fruits or flowers that thrive there.

The American Farm School and Krinos Olive Center Host Olive Oil Workshops

Greek olive oil producers gathered at the olive oil tasting workshop hosted by Perrotis College at the Krinos Olive Center in collaboration with the Athena International Olive Oil Competition (AIOOC). Participants tasted 10 highly prized olive oils from abroad (Italy, Spain, Tunisia, Israel, Brazil and Portugal) and learned about the parameters by which oils are evaluated.

The tasting workshop was complemented by additional sessions on the cultivation, processing and nutritional value of olive oil, and genomic technologies. Director of the Krinos Olive Center and Perrotis College Professor Athanasios Gertsis introduced the concept of dense planting systems and highlighted recent achievements of the Krinos Olive Center. Chair of the New Food Product & Business Development postgraduate program at Perrotis College and AIOOC judge, Dr. Kiki Zinoviadou, presented new trends and innovative

technologies in the production and standardization of olive oil. Finally, Mr. Haris Spyropoulos, Perrotis College Lecturer, closed the event with a presentation on the benefits of using social media for branding olive oil.



American Farm School and Passias Turkey Products Now Available in Supermarkets



In collaboration with meat-industry leader Passias, two new American Farm School turkey products are now available in Greek supermarkets. The School began working with Passias a year ago and has produced boiled and smoked turkey deli meats.

The partnership is expected to lead to new research and the training and development of specialists in the agri-food sector. The American Farm School selects, trains and supervises turkey farmers, setting specific standards for all stages of production, from rearing the turkeys through to the delivery of their meat to Passias. The School

also ensures the implementation of thorough quality assurance systems through extensive laboratory testing.

"The institution is well-known for the quality of its products. We will assist with all our efforts in maintaining the high bar set by Passias. The partnership will be an unparalleled learning opportunity for our students who will benefit from access to the state-of-the-art Passias facilities," states President of the American Farm School, Dr. Panos Kanellis. He also emphasized the mission of the American Farm School to educate young people in the agri-food sector by using hands-on training and real-world experience.



Recharging the Youth: New Agriculture for a New Generation

In collaboration with Rutgers University and the Agricultural University of Athens, the "Recharging the Youth: New Agriculture

for a New Generation" program was launched in 2018. The initiative, which is generously funded by the Stavros Niarchos Foundation, looks to create meaningful job opportunities in agriculture, Greece's second-largest employment sector; prepare young workers for jobs in food-related businesses and family farms; and help young people with an interest in food and agriculture start their own enterprises.

The program is open to participants 18-40 years of age, and training is available in a variety of sectors that have been identified as the most

promising. Emphasis is placed on entrepreneurship and business development, in areas including alternative tourism, apiculture,

medicinal and aromatic plants, livestock farming and dairy technology, sheep and goat farming, and sustainable production

> of legumes. The initiative will also support the development of a network of farm incubators and regional food innovation centers, with the incubators to be supplemented by other training sites, including existing farms and businesses that could eventually host internships.

President Panos Kanellis comments, "Through this collaboration we are committed to creating new actionlearning arenas that will bring Greece to the forefront of European innovation in the agro-food sector and create a fertile, sustainable environment for youth entrepreneurial engagement in

the sector - we will make this project a game-changer for Greek youth and a significant development opportunity for rural communities."



Preparing for the New Vasilios S. and Aphrodite B. Haseotes Middle School

Preparations for the new Middle School at the American Farm School are continuing at an accelerated pace. Construction of the brand new

Middle School and Auditorium buildings is progressing steadily and remains on schedule to be completed in the summer, so as to welcome the first incoming class in September 2019. Funded primarily through a generous gift from the Vasilios S. and Aphrodite B. Haseotes Family Foundation, the Vasilios S. and Aphrodite B. Haseotes Middle School is designed by the award-winning Thessalonikibased architectural firm 406 architects. The school will serve students in grades 7-9 and, in addition to classrooms, will include multiple science laboratories and STEM-maker spaces. The Auditorium will support audiences of up to 225 for lectures, performances, conferences and other campus-wide events.

In parallel with the construction, the educational program has been developed under the direction of the school's new principal, Mr. Dimitris Slavoudis. The curriculum has been presented to Elementary School parents at multiple meetings, giving them the opportunity to voice their views and articulate their

needs and expectations, a dialogue that the School intends to continue as it seeks to set yet another benchmark for educational excellence in Thessaloniki.

One of the unique elements of the philosophy and academic approach of the Haseotes Middle School will be the Career

and Learning Academy. Students will be involved in interdisciplinary projects related to real situations or issues occurring in the workplace. The activities will be coordinated by teachers in collaboration with professionals and business executives, with an aim to expose students to current societal and workplace matters. Topics will be drawn from the fields of health, technology, engineering, art, communication, law and entrepreneurship.

In keeping with the AFS mission, the Haseotes Middle School will provide holistic education designed to prepare students for high school and beyond. The curriculum builds on the standard curriculum required by the Ministry of Education in Greece, with enhanced teaching in Mathematics, Natural Sciences, and English Language, and provides environmental education and vocational guidance in addition. The program is further enriched with activities and coursework geared toward developing leadership skills, technological

literacy and personal growth, while ensuring a deeper appreciation for culture. Students will also be able to participate in a breadth of extra-curricular activities, including arts, sports, clubs and more.







High School Graduates Fulfill Their Dream Thanks to Study USA

Over the past seven years, more than 45 graduates of the American Farm School's High School have gone on to pursue their undergraduate degrees in the United States through the Study USA program, run by the Student Services Department. Six students from the class of 2019 have been accepted

to US colleges and universities, all with scholarships, including one with a full ride to Yale University. Study USA provides support and guidance to students wishing to continue their education in the US, from preparing for standardized testing, completing entrance applications and practicing interviews, to providing English language courses and practical information about life and studying in America. Study USA also hosts visits from American colleges and universities on the AFS campus, allowing students to speak firsthand with representatives and to familiarize themselves with a variety of institutions.

AFS Alumni Spotlight

Lutfie Gjurra



AFS '17 alumna Lutfie Gjurra is a sophomore at Rhodes College in Memphis, Tennessee, where she working toward a double major in Psychology and Theatre, and minoring in German Studies.

Lutfie felt an instant connection with AFS and holds the School in great regard. "I admire many aspects of AFS, but its community will always have a special place in my heart. It is a place with open doors and once you walk in, there is

always a person with a smile on their face, willing to spend time to help you." Lutfie was always very active on campus, but it was PeaceJam, a club dedicated to cultivating problem-solving and leadership skills, that created the most cherished memories and gave her confidence to believe in her abilities.

She also credits AFS with providing her the opportunity to study in the US, something which otherwise would not have been possible. Although the transition to college life was not easy, her time at AFS, and her involvement in the Study USA program - which places particular emphasis on English language, high marks and personal growth - gave her the courage to adjust to life on the other side of the world. The strong sense of community at Rhodes, like at AFS, helped with the adjustment and Lutfie has found her place in that community, participating in several theater productions, Peer Advocacy and volunteering weekly in the local community.

With her positive outlook, strong work ethic and eagerness to step out into the unknown, we are certain that Lutfie will be a success in whatever path she decides to pursue. "AFS taught me that dreams are not meant to be buried, but rather realized through hard work."

Eirini Symeonidou

Eirini Symeonidou graduated from the American Farm School's Vocational High School (EPAL) in 2018 and is now a freshman studying Agriculture at Berea College in Berea, Kentucky. She grew up spending time in her family's vegetable garden on the outskirts of Thessaloniki, and being from the area, she knew that AFS would give her the kind of education that would allow her to pursue a career in agriculture, as well as provide her with the opportunity to study in the United States.

Her passion for agriculture gave her a strong base, and Eirini was quick to immerse herself in her studies at AFS. She particularly enjoyed the practical components of her classes, learning to work the land in a respectful and sustainable way. When asked, she notes that in addition to her studies, she carries with her the sense of community and support the American Farm School gives to its students. "AFS does a lot of incredible things that I admire, but honestly what stuck with me from my experience as an AFS student is the support network the school offers," Eirini says. "I always had bright and accomplished people next to me, helping me with anything I needed, taking into consideration my ideas, giving me guidance, motivating me throughout my academic journey and giving me inspiration."

Eirini participated in a 4H exchange program after her junior year of high school, during which time she stayed with a family in Virginia. It was after this experience that she knew she wanted to study in the US. The Study USA Office helped her prepare for her next challenge through intensive English language courses, preparation for university entrance exams and other aspects of studying in the US. "Coming here



and starting classes I realized how well AFS has prepared me. Most students, including Americans, did not know a lot about college writing and strategies for academic success; things that I knew because of AFS!"

Eirini's AFS family wishes her all the best as she continues this next chapter...

Perrotis College Alumni Spotlight

Eva Kalaitzidou



Eva Kalaitzidou graduated from Perrotis College with a BSc in International Business in 2014 and is now pursuing an MSc in Marketing in the Agro-Food Sector from the Perrotis College School of Graduate Studies. Eva grew up on her family's peach and cherry farm, spending her summers harvesting fruit.

Although she had always wanted to study at Perrotis College, it wasn't until she found out

about the College's scholarship program that she dared to believe her dream could become a reality. Undergraduate studies in marketing proved to be particularly influential for Eva. "The fact that what we learn is not just theoretical sets Perrotis College apart from other schools. We not only participate in product creation, we package and label, sell to the Campus Store, then advertise products and present them at conferences and trade shows. Taking on projects in this way enables us to experience the whole product life-cycle. The result may not always be what we expected, but the experiences have always been valuable, giving me confidence for my future endeavors."

During her time as an undergraduate student, Eva was also able to gain formative work experience in several departments at the School, including the Campus Store and Student Services. Today, Eva works in the Enrollment and Communications Office for Perrotis College, organizing presentations and information sessions for prospective students; all this while she completes her final year in the MSc program.

She is passionate about marketing and hopes to make a difference in the agri-food sector. "Modern marketing methods and techniques have the potential to become the catalyst of growth in the Greek agri-food sector. Still, many people stubbornly refuse to realize it. The biggest gap in the industry today is that producers do not realize the value of proper marketing," Eva states. "But I want to believe that the current generation of graduates who have studied agriculture, food technology or something similar - like me - have understood the real value of digital marketing."

We know with her passion and work ethic, Eva will succeed in whatever she puts her mind to!

Irenaeus Georgiou

Born and raised in Cyprus, Irenaeus Georgiou graduated from Perrotis College in 2018 with a BSc in Food Science and Technology.

His passion for food started at an early age - his father owned a taverna in Cyprus where he waited tables, eventually working his way into the kitchen.

Irenaeus attended a vocational high school in Limassol, specializing in culinary arts. After several years living abroad, he found himself in Thessaloniki, where he began attending professional dairy processing and beer-brewing seminars. It was through these seminars that he first came into contact with professors from Perrotis College, experiences which shaped his eventual decision to pursue

his studies here. "Thanks to the encouragement of the professors I met at the time and the fact that food was and remains my passion, the decision to enroll in the Perrotis College Department of Food Science and Technology was a no-brainer."

The teaching philosophy and hands-on curriculum at Perrotis College are what drew him to the program. "The way in which

courses are taught exposes students to the industry in a meaningful way. We don't stop at theory - we get practical training and a 360° view of the sector. We don't only create new products, we learn about relevant legislation, business practices, etc."

Irenaeus in now pursuing an MSc degree in Food Science and Technology at the Perrotis College Graduate School, and is contemplating his future after Perrotis. One possibility is to continue his postgraduate studies abroad. "At the moment, I'm looking for scholarships so I can

cover the costs of studying in a foreign country. The degree from Perrotis is particularly important, especially since it is an Englishlanguage university. I think it will open many doors."

Maureen Mukuba

Fall 2017 marked the beginning of the Camp to Campus program, which provides college-aged refugees in Greece the opportunity to take classes at Perrotis College. Of the group, two were awarded merit-based scholarships to pursue full degrees at Perrotis College. One of the recipients, Maureen Mukuba from Uganda, is now in her first year of the BSc in International Business.

Although getting back into full-time education after a number of years away was a challenge, Maureen quickly found her feet. Obtaining her degree is incredibly important to her, as is integrating into her new home. Maureen has embraced life at Perrotis College, living on campus in the Aliki Perroti Residence Hall and acting as the 1st year student representative on the Student Council. She is

enjoying all her courses, particularly those relating to marketing. "The Professors are very knowledgeable and always ready to

offer advice," she says. For Maureen, one of the best aspects of studying at Perrotis is the sense of family that has been created, with staff and students alike welcoming her warmly and always ready to help.

Maureen hopes to continue on to the MSc program, and with her focus, drive, adaptability and positive outlook, we are confident she will succeed.



STEM Education in Action...High School Students Create Smartphone App



The Entrepreneurship Club, open to students from the General and Vocational High Schools, applies STEM learning to real-world projects. Each year, students create a model business supporting a product of their own

creation. This year, participants developed an innovative smartphone app called Beleaf, which helps to address problems in urban environments, such as damaged public property, defective signage and more. The user photographs the problem and uses the platform to alert the apppropriate municipal authority. Through the application, issues are recorded, reported, and progress towards resolution is tracked. Beleaf enables the interaction both among users and between citizens and public agencies.

The application was created using mockplus, an app development tool for mobile and desktop. Students received training on the program through a series of seminars and then designed and built the application themselves. Members of the Entrepreneurship Club recently presented their app at a competition of virtual enterprises organized by Junior Achievement Greece.



Elementary School Adds Two New Classrooms

Two new classrooms and teaching staff offices have been added to the existing Elementary School building to accommodate the first cohort of sixth graders in September 2018. Construction of the new extension was partially funded through a generous gift from the One Bright World Foundation. The new classrooms and offices are located at the rear of the existing building and have been constructed and furnished to the same high environmentally friendly standard as the rest of the Elementary School, reflecting the American Farm School's commitment to sustainability in all aspects of education.



Cyclical Economy at the Heart of the Elementary School

In keeping with the schoolwide effort to promote sustainable practices and reduce waste, our Elementary School students regularly engage in interactive activities which teach them about various aspects of a cyclical economy, each grade level reinforcing the concepts learned in the classroom with hands-on projects.

about natural resources by observing plant and animal species - an exercise which inspired several crafts and group projects.

Third graders put their creativity to the test by upcycling used fabric sacks into handbags, and creating improvised looms to practice their weaving skills. Fourth Acting on their concern about animal and plant waste produced by the School, students from the fifth grade compiled and shared a list of ways natural waste can be re-used in our everyday lives, and finally, the sixth graders repaired old or damaged toys, which, guided by the spirit of community service they have learned through the School, they







First graders recently learned about composting by constructing their own vegetable composter, and made their own cleaning products using natural cleansers such as lemon juice and vinegar. Students in the second grade toured campus to learn

graders built their own miniature wind turbines, measured how much energy they produced, and even designed a campaign promoting the use of alternative forms of energy, including advertisements for wind turbines and solar panels.

proceeded to donate to a local child care facility in need. Even at these young ages, our students come to understand themselves as members of a community, and eagerly assume their responsibilities towards the environment and towards each other.

American Farm School at Foodexpo Greece



The American Farm School was an eye-catcher at this year's Foodexpo, the largest food and beverage exhibition in Southeast Europe which takes place in Athens every March. Over the course of the three-day trade fair, the School displayed its foodproducts, and distributed samples of milk, cheese and yogurt to visitors,

sharing the work of the Educational Farm with thousands of attendees from across Europe. In addition to the better-known dairy products the School is famous for, AFS showcased other Educational Farm produce, including traditional "hilopites", herbs, spices, and more.

While communicating information about the School's label and products, AFS representatives took the opportunity to highlight the institution's unique work, informing guests about new programs and initiatives across educational divisions - from the Kindergarten, High School and Perrotis College, to Extension Services, summer programs and collaborations with Greek businesses. The event was a great success for Greece and the Greek agro-food sector, attracting over 70,000 visitors from around the world.





Masterclasses for High School Students



A collaboration between Europe Direct Central Macedonia, the Dimitris & Aliki Perrotis Library and the AFS Student Services department recently offered a masterclasss to students from the Vocational High School. "High School Business Bootcamp: Developing your startup business in the modern food market" provided students with information on current management trends and techniques, effective communication, entrepreneurship, critical thinking, marketing and brand positioning. The masterclass was designed to build skills and confidence so that students will feel ready to develop their own businesses once they leave AFS.

For the fourth consecutive year, students from the General High School became CERN researchers for a day. Some 85 students from 15 different high schools participated in the CERN masterclass held on the American Farm School campus. The Masterclass is co-organized by CERN, the Laboratory Center for Physical Sciences, Center for the Secondary Education of East Thessaloniki, the European Elementary Particle Physics Group and the Nuclear Physics and Elementary Laboratory Particles of the Department of Physics of Aristotle University of Thessaloniki. Students learned about atomic and nuclear physics from CERN scientists first-hand, and participated in ALICE (A Large Ion Collider Experiment), which is featured as one of the primary research projects conducted at the CERN Large Hadron Accelerator (LHC). The Masterclass closed with a video conference to discuss the results with researchers at CERN and with students from the University of Lyons, France.

USDA Visits the American Farm School

Since 1991, the European Biological Control Laboratory (EBCL), part of the United States Department of Agriculture's Agricultural Research Service (USDA/ ARS), has conducted important research in laboratories on the School's campus. The mission of the EBCL's work is to develop their work has generated solutions to several problems in agriculture and public health in Greece and worldwide.

To celebrate 100 years of the European Biological Control Laboratory in Europe, (the first laboratory began operating in Graduate Studies, the Educational Farm and the greater campus, and engaged in an olive oil tasting session. They expressed their enthusiasm for both the facilities and the programs offered by the Institution, which are doing much to shape the next generation of agri-food specialists. Their visit was





novel biological control approaches that can be used to manage invasive plants and insects which can devastate local agriculture and affect public health - but through the use of natural enemies. The ECBL researchers have multiple collaborations with Greek governmental agencies and academia, and

France in 1919), representatives from the USDA visited the School to see the EBCL laboratories, the campus, and to learn more about the importance of the EBCL/ AFS collaboration. The group spent time speaking with faculty and touring the Aliki Perroti Educational Center, the School of capped-off with a reception held in the Aliki Perroti Student Residence Hall, where an address commemorating the occasion was given by Chavonda Jacobs-Young, Administrator of the USDA Agricultural Research Service.

Planned Giving

Planned Giving allows supporters of the American Farm School to integrate gifts into their overall financial, tax, and estate planning. A planned gift enables a donor to make a lasting impact by contributing significantly to the School and making a difference by helping many future generations of students.

METAMORPHOSIS SOCIETY

The Metamorphosis Society recognizes and honors the generosity and foresight of those individuals who have made provisions in their estate that include the American Farm School and who have apprised the School of their intentions. The name "Metamorphosis" is chosen for its deeper connection to the School's tradition of providing education that brings about positive change, or "metamorphosis," in the individual.

David Acker Charlotte Armstrong

Peter Bien **Emily Carey**

Mr. & Mrs. C.W. Carson Jr.

Hugh Cullman Marvin Fisher

Dr. and Mrs. Alexander Doolas Phillip G. and Mary Foote

Barbara K. Heming Sarah Holland

Truda Jewett

Claire C. Katsanis Edmund Keeley

Elizabeth (Tad) Lansdale Susan Mees Longfield

Mary R. and Charles F. Lowrey

Nicholas Pisaris

Gail and Ruth Schoppert Charles L. and Joan Thomas

Nancy Worcester

BEOUESTS

By including the American Farm School in their wills, the following individuals provided a final gift that will strengthen the School's endowment or support other educational needs.

Theodora Abrames Charles Storrs Barrows III James Michael Broomas

Esther Carhart

Jean S. Crosby Maria Couvaras

Alexander Drapos Angeline Ducas Lula Ducas

Elizabeth M. Godley

Darlene Keeley Eve Curie Labouisse Clara Nickolson

Eleanor McKay Norris

Mr. & Mrs. James G. Paterson, Sr.

Andrew Ponaras Mary Elizabeth Stewart Barbara L. Wood Winifred E. Weter

ESTATES AND TRUSTS

By creating an estate or trust, the following individuals provide annual support to the American Farm School that will last past their lifetimes.

Esther Carhart Mary P. Gill Ernest Thomas Chepou Henry T. Maijgren Philip and Hazel Constantinides Demosthenis Raptelis Lois Kerimis Dean C. Zutes

Fred W. Kolb

For more information about joining the Metamorphosis Society and other Planned Giving opportunities, please contact Laura Sommers at lsommers@amerfarm.org.

IN LOVING MEMORY

Trustee Charlotte Armstrong

The memory of beloved Charlotte P. Armstrong, who served as Chairman of the American Farm School's Board of Trustees from 2007 - 2013, was honored by Trustees during their annual visit to the School. On June 6 they gathered at the Konstantinos Tsatsos olive grove and symbolically planted an olive tree in her memory in the presence of staff, friends of the School and US Consul General in Thessaloniki Ms. Rebecca Fong. Mrs. Armstrong died in Maine on December 8, 2017.

Trustee John Moscahlaidis

Former Trustee and longtime supporter of the American Farm School, John Moscahlaidis passed away in August 2018. John became a Trustee of the School in 1980 and served on the Board for several years. Through the Moscahlaidis Foundation, he contributed generously to the renovation of the square in front of Princeton Hall, and helped to renovate a section of the High School residence halls. John's kindness, open mind, and warmth will be remembered by his AFS family.

Trustee Alfred A. Moore

A long-time friend and Trustee of the American Farm School, Alfred "Alfie" A. Moore passed away in December 2018. Alfie became Trustee of the American Farm School in June 1973 and served for a number of years. His children and grandchildren have carried on the family association with AFS through their participation in the Greek Summer program. Alfie touched many lives and will be missed by all who knew him.

Long-Time Supporter Darlene Keeley

A friend of the American Farm School for many years, Mrs. Darlene Keeley passed away in February 2018. Mrs. Keeley and her husband, Hugh, were champions of the School for well over 40 years, making frequent visits and supporting various projects throughout the campus. The American Farm School is especially grateful to Mrs. Keeley for remembering us through a bequest in her will upon her passing.

Long-Time Supporter Jean S. Crosby

Jean S. Crosby, a champion of the American Farm School for over 40 years, passed away in July 2018. The School is grateful to the long-time support of Mrs. Crosby and her late husband, George, as well as for the generous bequest she left to the School on her passing.

To subscribe to our electronic newsletter *E-Sower*, please send us an email at sower@afs.edu.gr

American Farm School & Perrotis College

800 Third Avenue Marinou Antipa 54 Post Office Box 60097 Suite 2800 GR-57001 Thessaloniki, Greece New York, NY 10022 Tel +30-2310-492-700 Fax +30-2310-492-710

Tel +1-212-463-8434 Fax +1-212-292-3801 info@afs.edu.gr usoffice@amerfarm.org

www.afs.edu.gr