THE INTERNATIONAL SCHOOL OF AGRICULTURAL SCIENCES
ANNUAL REPORT
2015-2016
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Dear Friends,

We are pleased to present you with the 2015-16 annual report, a summary of the past year’s activities and accomplishments at the International School of Agricultural Sciences of the Robert H. Smith Faculty of Agriculture, Food and Environment of the Hebrew University.

This year has seen a dramatic increase in activity at the International School, as we continue to develop new academic programs. In May 2016, the Israel Council for Higher Education approved our fifth International MSc program. This program in Viticulture and Enology draws, first of all, on thousands of years of tradition surrounding grape growing and wine making in the Holy Land. To this, we add the research expertise of our Faculty, and a booming, award-winning local industry of international renown. The new program is unique in its emphasis on wine production under the warm, dryland conditions expected to challenge the wine industry in many parts of the world as a result of global climate changes.

Finally, in the summer of 2016, we held two Summer Schools for MSc and PhD students from Europe and beyond. The first Summer School, “Irrigation of Agricultural Crops with Recycled and Desalinated Water in the Middle East: Problems and Challenges”, was organized by the International School as a partner in the Euroleague for Life Sciences (ELLS). The second Summer School, “Plant Breeding & Genetic Engineering”, is a special summer program funded by the Israeli Council of Higher Education (CHE), with scholarships for students from China and India. Both programs include academic lectures by faculty members, field trips, greenhouse work and modelling exercises.

All of these activities, together with our continued contact with our international alumni and service to other overseas exchange and graduate students and post-doctoral fellows on campus, are carried out by the School’s exceptionally able staff headed by our Administrative Manager Ms. Rachel Inbari; Ms. Noa Schwarzwald, who oversees our international programs and serves as our alumni network coordinator; the programs’ Academic Heads, Prof. Rina Meidan (Animal Sciences) and Prof. Betty Schwartz and Dr. Aliza Stark (Nutrition), and the program coordinators Ms. Nuti Ben-Aharon, Ms. Randy Lang and Ms. Mala Braslavsky.

This has been a very busy year for us at the International School, yet we are highly motivated by a strong belief in the potential of this system. We are very excited about this expanded range of activities, which are carried out in a highly developed veterinary support service. We are confident that our students’ understanding of this system will enable them to become leaders in the field upon returning home. Prof. Rina Meidan was the academic head of the program.
The current MSc class achieved a final grade point average (GPA) of 89 (Very Good on the HU grading scale), a slight increase over last year’s figure. A GPA of 80, and a grade of at least 85 on the research exercise and oral seminar, are the minimum requirements for transfer to the thesis track, and the International School requires that a student have a GPA of at least 85 to be considered for a 2nd year Pears Scholarship. Of the 21 students in the class, eight transferred to the thesis track at the Smith Faculty. The figure below illustrates the 2015-16 class GPA distribution.

The Thesis Abroad program in Nutritional Sciences for international MSc students was launched in the 2013-14 academic year, thanks to the generous support of the Pears Foundation. The program offers qualified nutrition students the opportunity to carry out their thesis research in their home countries within the framework of a project supervised jointly by a local researcher and a Smith Faculty member.

This program is particularly important for Nutrition students, who are unable to conduct surveys and communicate with research subjects in Israel due to the language barrier. The research topics selected for the Thesis Abroad program are of direct importance for communities in the student’s home country. The program thus carries great promise for disadvantaged communities in developing countries, as research findings can be applied directly for the benefit of the local society, while the student receives invaluable practical experience.

Two projects were selected this year for Thesis Abroad Pears Scholarships:

**Mildred Wangari Maingi – Kenya**
Supervisor: Dr. Sharon Iron-Segev, in collaboration with Prof. Judith Kimiywe, Kenyatta University.
Topic: Knowledge, Attitudes and Practices of Mothers on Complementary Feeding of Children 6 to 23 Months upon Implementation of Baby Friendly Community Initiative in Koibatek, Kenya

**Pearl Ainembabazi – Uganda**
Supervisors: Dr. Limor Ben-Yacov and Dr. Aliza Stark, in collaboration with Dr. Silver Bahendeka – St. Frances Hospital.
Topic: Metabolic Syndrome Risk Factors in Predominantly Cattle Keeping and Non-Cattle Keeping Rural Districts in Uganda.

A third Thesis Abroad project will be jointly funded by the International School and a research grant.

**Salome Abele – Kenya**
Supervisor: Prof. Ram Reifen, in collaboration with Prof. William Macharia, Department of Pediatrics and Child Health, Aga Khan University.
Topic: Topic: Pilot Trial on Chickpea-Based Supplementary Food (CBSF) in Children Aged 12–36 Months in Murang’a County, Kenya.

During the period of this report, eight Plant Sciences and Environmental Quality Sciences students from the class of 2014-15 successfully completed their master’s theses.

Three students from the 2013-14 Nutrition program conducted thesis research in their home countries this year and returned to Israel for the thesis defense in December 2015.

**Oluymika Yannife Adetola – Nigeria**
Supervisor: Dr. Aliza Stark in collaboration with Dr. Oluseye O. Onabanjo of the Federal University of Agriculture, Abeokuta.

Oluymika has been accepted to a PhD program at Pretoria University, South Africa. The research will be published in the near future in a scientific journal.

**Frances Enaru – Uganda**
Supervisor: Prof. Ram Reifen in collaboration with Dr. William Kyamuhangire of Makerere University.

**Janerose N. Lusweti – Kenya**
Supervisors: Dr. Sharon Iron–Segev and Dr. Aliza Stark in collaboration with Dr. Elizabeth Kamau Mbugua, Egerton University, Kenya.
THE INTERNATIONAL SCHOOL

Students Support

Twenty-one students participated in the MSc programs this year, 12 in the Nutritional Sciences program and 9 in Animal Sciences. Twelve countries were represented: Malawi, Nicaragua, Uganda, Ethiopia, Kenya, Nigeria, Honduras, Sri Lanka, India, France, the US and East Jerusalem, Israel. The International School places priority on helping our students meet the challenges of living and studying in a foreign country. Many of our new students have never travelled outside their home countries; our goal at the International School is to help our students feel welcome and at home from the minute they arrive in the country, and to provide them with a safety net whenever needed. During Orientation Days, the staff and students get to know each other, and students are familiarized with the academic program, the library, and the university computer system. We provide a tour of the campus, as well as an off-campus visit to Herzl Street, Rehovot’s nearby commercial district. This year, the two-day orientation came to a close with a friendly gathering of new students and alumni from the previous year.

The coursework of the MSc programs is rigorous. Students quickly become deeply absorbed in their studies; the school’s staff does its utmost to help with the stress sometimes associated with intense academic studies, and we are always happy to hear that we have been of assistance. The following is an excerpt from a letter signed by all the participants in this year’s MSc programs:

“On behalf of the 19th batch of both Nutrition and Animal Science students. We would like to extend our appreciation for the amazing work done by you and your school team members for the successful accomplishment of our one year M.Sc. study program... has impressed the students immensely and we deem ourselves honored to have had you as strong international M.Sc. program coordinator. It’s all because of you and your team members’ dedication and hard work that our study have been successfully completed in time. We feel proud that we had such a wonderful M.Sc. Program coordinator. We sincerely appreciate your role in our successful accomplishment and we wish that you would keep up the good work in future too”

NEW CLASS OF 2016-17

MSc in Plant Sciences and Environmental Quality Sciences

A new class of international students began the 2016-17 academic year in October 2016. This year, we have 25 students in two MSc programs, 13 in Plant Sciences, and 12 in Environmental Quality Sciences. The students hail from 12 countries: Ghana, Kenya, Nigeria, Tanzania, Ethiopia, Serbia, Mexico, India, Nepal, Ecuador, the USA and Canada. An exchange student from France will be studying with the group for one semester.

PROFESSIONAL FIELD TRIPS

Professional field trips, an important element of the International MSc Programs, are aimed at demonstrating how theoretical information learned in class is implemented on farms, in industry and in other real-life settings. Participation in conferences exposes students to sophisticated global perspectives on a range of topics, while also presenting opportunities for networking. The following is an overview of the field trips and conferences included in this year’s program.

Tour of the Triwax Bee Research Center

Animal Sciences and Nutrition students were invited to visit the Triwax Bee Research Center on the Smith Faculty campus. Mr. Haim Kalev gave a presentation about beekeeping in Africa, and discussed the importance of bees in crop pollination and the production of different types of honey.

Cattle Feed Center Field Trip

Participants in the Advanced Ruminant Nutrition and Feeding course visited the Cattle Feed Center on Moshav Be’er Tuvia, where they were introduced to methods for preparing cattle feed to increase its nutritional value. The group also travelled to the town of Sderot where they visited Lachish Industries, a manufacturer of machinery for producing cattle feed.

Visit to Leket Food Bank

Food security for all is the mission of Leket Israel Food Bank, Israel’s largest food distributor to the needy. Our Nutrition students visited Leket to learn how this NGO collects and redistributes food to low-income households. The students lent a hand with packing fresh fruit and vegetables, and viewed a presentation about food security and its challenges.

Tour of Fish Breeding Farms

Animal Sciences students participating in the Aquaculture course visited a fish-breeding farm on Kibbutz Dan to observe how various species of fish are bred. Fish are an important source of protein worldwide. The industry is in crisis due to the rapid depletion of ocean fish populations resulting from over-fishing, and the need for aquaculture is thus on the rise. Kibbutz Dan, in the north of Israel, is well known for production and export of trout. In the past decade, the farm has also begun producing caviar for export to Europe and Russia, a process which takes at least six years. The group also visited the ornamental fish breeding facility on Kibbutz Ma’agan Mikha’el.
Israel National Dairy Conference
Supplying milk and dairy products for the world’s growing population is a major agricultural challenge, and this is expected to be a top priority for the industry in coming years. HUJI Animal Sciences students attended the annual Israel National Dairy Conference at the Ramada Hotel in Jerusalem, hearing lectures presenting the ways in which modern milk production will meet projected demand in 2038 and 2050.

Visit to Kaplan Hospital
Nutrition students participating in the Topics in Clinical Nutrition course enjoyed a fascinating tour of Kaplan Medical Center to observe first-hand the complexity of a clinical dietician’s work in a hospital. Visiting the kitchen and several departments, they learned about the importance of computerized documentation of clinical work, the teamwork required of physicians, nurses and other staff members, and challenges and achievements in the field of dietetic service in recent years. The visit greatly contributed to the students’ understanding of the role of the diettian in a hospital setting, and provided them with food for thought about applying their newly gained knowledge in their home countries.

10th Congress of the International Society of Nutrigenomics and Nutrigenomics
Students in both study programs attended the 10th Congress of the International Society of Nutrigenomics and Nutrigenomics in Tel Aviv, gaining exposure to the most current research in the field of interactions between nutrients and genes, and learning about future applications. Practical implementation in the field of medicine, as it evolves from group oriented care to individually tailored treatment based on the patient’s genetic makeup, was a subject of wide discussion.

Hanukah
International students and staff enjoyed a Hanukah celebration in the Smith Faculty’s teaching kitchen. Working in groups, students prepared potato pancakes (latkes) and jelly donuts (sufganiot), lit holiday candles, sang Hanukah songs and played the “dreidel game”. They then gathered around the table for a well-earned feast and raised their glasses in a toast of “L’Haim”.

Passover
We celebrated Passover with a mock Seder in which the students learned the story and rich traditions of this important Jewish holiday. Among our guests were alumni, instructors, and a journalist who covered the event for the largest Jewish newspaper in Germany, the “Juedische Allgemeine”. The story and photos can be viewed at http://www.juedische-allgemeine.de/article/view/id/25277

Annual International Banquet
The International School held its 18th Annual International Banquet in June, in the spirit of the theme “Food Brings People Together”. Students prepared traditional dishes from their home countries for more than 70 guests: alumni, teachers, Faculty staff, colleagues and Israeli students. This year, an invitation was extended to representatives of Project Ten, an international development program that operates volunteer centers in developing areas, who presented the organization and engaged the students in an exercise. Project Ten combines volunteer work in local communities with service in the fields of international development, cultural exchange, and Jewish activism. All involved responded enthusiastically to the possibility of future collaborations.

Social, Professional & Cultural Events

Holidays

Annual International Banquet
The MSc program strives to provide international students with the opportunity to experience Israel and its people, culture, history and geography, and to meet other students, both Israeli and international, studying at the Smith Faculty. The International School of Agricultural Sciences organizes various activities throughout the year to make this happen.

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International Graduation Ceremony
On September 11, 2016, a year of intensive studies reached its conclusion with the International MSc graduation ceremony held on the campus of the Smith Faculty. Over 100 guests were in attendance at this happy occasion, including university staff, friends and family of the graduates, instructors, alumni and colleagues. We were also honored with the presence of the Ambassador of Sri Lanka and representatives of the embassies of Ethiopia and Kenya.
In May 2016, the Israel Council for Higher Education approved our proposed International MSc program in Viticulture and Enology. The program, with Prof. Zohar Kerem as its academic head, ties into an ancient tradition of grape cultivation and wine-making in the Middle East, and connects with an award-winning local industry of international renown. This study program, the fifth MSc major offered by the International School, is unique in its emphasis on dryland wine production in a warm climate, conditions that the wine industry is expected to face worldwide with increasing global climate change.

The MSc in Viticulture and Enology is an 18-month program spanning four academic semesters. The program includes theoretical coursework, practical work in the vineyard, wine-making classes in cooperation with the Soreq Winery School, and a workshop in Italy or France. Graduates will be offered internships in commercial wineries in Israel and abroad.

The new program was officially launched at an opening celebration held in September, 2016. The study program was presented to potential students, members of the wine industry and other interested guests. We are proud to announce that the first class of this graduate program will open in March 2017.

All 21 participants in the program were graduated, and 11 of the new graduates will be continuing their studies in the MSc thesis track of the Hebrew University. Jose David Aguirre, who received his degree in Animal Sciences, spoke on behalf of the graduating class:

"Most of the knowledge that we take for granted in our modern world is sometimes unavailable in underdeveloped countries, and you can see in places like Nicaragua, huge banana farms trying to treat an unknown disease with massive amounts of pesticides. By this example I want to remark how important it is for researchers to communicate the gained knowledge to those who need it. Being successful is not only about making great and innovative things, but also it can be as simple as communicating the knowledge you have gained to those who need it. So today I encourage you to communicate the knowledge you have gained and the knowledge you will gain throughout the years to the small farmers like the ones in Nicaragua, because the basis of human development and the development of our countries, is the equal distribution of knowledge".

The Pears Foundation Annual Gathering

On November 20, 2016, the Pears Foundation Annual Gathering was hosted by the International School at the Smith Campus of the Hebrew University. This annual event, sponsored by the Pears Foundation (UK), brings together the Hebrew University’s three MSc programs in the field of international development: Agriculture Sciences, Community Development, and Public Health. These programs cover a wide range of academic disciplines from agronomy and environmental studies, to community development and education, and from nutrition and epidemiology to pharmacology and health care administration.

Sixty-five international students studying in the three different programs participated in the event. Representing over 20 countries including Israel, they contributed their diverse experience to the event, while gaining an opportunity to form new friendships and professional connections. The annual meeting, a creative and supportive milieu, crosses the boundaries of academic disciplines, cultural backgrounds, and personal interests and skills, creating a diverse community committed to making positive contributions to solving global problems.

This year’s theme, “Nutrition-Sensitive Agriculture: A Multi-Sectoral Approach”, was introduced by Dr. Tamer Malchi, head of the Israel chapter of Engineers Without Borders. The topic was chosen for its relevance to students of all three programs; we were confident that they would each contribute their unique expertise and learn collectively from one another. Working in small interdisciplinary groups, students were assigned a reading on a development issue related to the theme, and challenged with identifying the core problems, root causes and outcome effects of the issue. They were then asked to suggest possible solutions for its resolution. Topics included, for example, the decline of marine fisheries as a result of climate change in Mozambique; malnutrition among pregnant women in Kenya; and food insecurity in Pakistan. Students proposed interventions to increase the nutritional value of crops, to encourage healthier food choices to counter the risk of cardiovascular disease, and to promote small-scale agriculture through microfinancing for rural women.

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A NEW INTERNATIONAL GRADUATE PROGRAM
MSc in Viticulture & Enology
PEARS SEED GRANT PROGRAM
For the Promotion of Agricultural and Nutrition Projects

As an academic institution, we encourage our alumni to engage in research activities. With the generous funding support of the Pears Foundation, we have established seed grants for preliminary development of research and community projects. The goal of the Pears Seed Grant Program is to stimulate scholarly initiatives by encouraging alumni to explore new directions in agriculture and nutrition, via applied or training-related research. This research should contribute to the development and/or evaluation of programs aimed at addressing challenges on an academic, national or local level, and will hopefully generate findings that could serve as the basis for submitting funding proposals to external funding agencies.

Collaboration among program alumni is encouraged, and all alumni of the MSc programs are invited to submit proposals for new projects of 12–18 month duration. Proposals are subjected to competitive review by a panel that ranks the proposals on their projected contribution to the community and their feasibility. Alumni whose proposals are favorably evaluated are awarded a grant of USD 5,000. Last year, four projects were funded.

**NAME OF APPLICANT**  
**PROJECT**  
**COUNTRY**

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<tr>
<th>NAME OF APPLICANT</th>
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<tr>
<td>Alice Wunyala</td>
<td>“Backyard mushroom cultivation as an income generation venture and means to reduce youth unemployment”</td>
<td>Ghana</td>
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<tr>
<td>Lydia Quanash</td>
<td>“The role of medicinal and aromatic plants (MAPs) for sustainability of rural livelihood in Nepal”</td>
<td>Nepal</td>
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<tr>
<td>Joseph Kungu</td>
<td>“Promote Agriculture and Nutrition Project at Sandlani Community, Swaziland”</td>
<td>Swaziland</td>
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EXAMPLE OF A SEED GRANT PROJECT
Promoting Agriculture and Nutrition Project at Sandleni Community, Sawziland

The central goal of this amazing, inspiring project conducted by one of our alumni is to improve the nutrition and health status of all vulnerable groups in the Sandleni Community, especially orphans and vulnerable children (OVC), by providing an effective, comprehensive, decentralized, coordinated, sustainable and enabling environment for the provision of food and nutrition services.

**Anticipated contribution of the project**

The project is aimed at reducing morbidity and mortality caused by nutrition-related conditions. Chronic malnutrition among children will be alleviated by supplying enough food for everyone, including pregnant women. The livelihood of the community members will be enhanced by their ability to produce enough food for their families and sell the surplus to finance other expenses. Employment opportunities will also be improved. This contribution towards a well-fed society will lower the incidence of malnutrition and stress-related health problems, which will in turn improve life expectancy in this country.
MASHAV INTERNATIONAL TRAINING COURSES

MASHAV - Israel Ministry of Foreign Affairs Agency for International Development Cooperation

International development cooperation is a fundamental part of development diplomacy and an inherent part of Israel’s foreign policy. MASHAV emphasizes the importance of creating effective partnerships for the implementation of cooperative development projects.

MASHAV activities focus on areas in which Israel has a comparative advantage and/or accumulated expertise. The list of such fields is extensive, including water resource management and irrigation, desert agriculture and prevention of desertification, early childhood education, community development, emergency and disaster medicine, refugee absorption and employment programs, and many others.

Here at the International School of Agricultural Sciences we conduct short-term professional training courses in partnership with MASHAV, having a shared commitment to cooperation throughout the implementation. MASHAV extends a hand in partnership wherever Israel’s expertise is relevant.

Course on Food Safety

Malnourishment is a serious problem for a large part of the world’s population. While food security issues can be addressed by increasing the yield and the nutritional value of indigenous crops, this strategy will fail to sustain a population if food safety is compromised.

Improper treatment of crops, unsanitary handling of foodstuffs, and accidental contamination can all threaten food supplies. Appropriate measures are needed to ensure safe and sanitary conditions at all stages in the chain of supply and trade, from cultivation and harvest through processing, packaging, transport, and storage of food.

A month-long MASHAV study program, Feeding the Future: Food Safety and Technology in Times of Global Change, provided 28 participants from 12 countries with management skills for confronting hazards and threats in the food industry. They gained capabilities for critical evaluation of the nutritional status of foods, and developed an awareness of potential health hazards during cultivation, processing, transport and storage of food supplies. The program, under the academic coordination of Prof. Baruch Rubin, provided students with environmentally sound decision-making tools for coping with evolving challenges to agriculture. The 20 participants, from 12 countries including Ethiopia, Panama, Thailand, Paraguay and Botswana, learned about effective agricultural utilization of unconventional water resources such as recycled water, as well as efficient use of fresh water through improved irrigation techniques. The role of biopesticides in agriculture, sludge reuse, and organic farming were among other topics covered in the course. Participants returned home equipped with information, methodologies and concepts that they can adapt and implement when confronting challenges unique to their own countries. In addition, the course provided a framework for continued networking and research cooperation between the participants and Israeli experts in the field.

Course on Bioinformatics & Biotechnology

A group of 26 biotechnology specialists from 14 countries — Nigeria, Ethiopia, Ghana, India, Costa Rica, Ecuador, Georgia, Kazakhstan, Moldova, Serbia, Turkey, USA, the Philippines and Vietnam — convened in Israel to take part in a month-long training and enrichment program on Bioinformatics and Biotechnology. In view of projected changes in agricultural practices stemming from global environmental changes, the program was aimed at providing participants with innovative tools in the fields of agro-biotechnology and microbiology, plant molecular biology, and basic principles of bioinformatics. Also included in the course were six full days of hands-on laboratory work in plant molecular biology, which were planned by Prof. Edouard Jurkevitch, the academic coordinator of the course.

Course on Nutrition

The field of nutritional science faces new challenges in light of global changes in the human diet. While the problems of malnutrition and infectious disease were of central importance in the past, an emerging trend towards over-nutrition and chronic illness, including cardiovascular disease, diabetes, and cancer, is increasingly the focus of research in this field.

Widespread consumption of fast food, high in fats and simple sugars, has brought about a transition in the nutritional status of millions, particularly for a growing segment of the population of developing countries. The convenience and availability of processed foods have led to a dramatic decrease in the contribution of natural, locally grown products to the diet. Our deepening understanding of the relationship between diet and health has made it clear that dietary trends must be redirected.

These issues were the focus of discussion in the MASHAV course, Nutrition in a Changing Global Environment, under the academic coordination of Dr. Aliza Stark. Twenty professionals from 11 countries, including Armenia, Colombia, Ghana, India, Kenya, Moldova, and Vietnam, participated in the course, held from November 21st to December 15th, 2016 at the International School of Agricultural Sciences in Rehovot. The course covered a wide range of current issues in nutritional science, such as the role of nutrition in the human life cycle: infancy, childhood, adolescence, motherhood, adulthood, and old age. Also discussed were our understanding of evidence-based nutrition, the obesity epidemic, malnutrition, functional foods, and nutrigenomics.
In light of the growing shortage of potable water in the Middle East, agricultural production will become increasingly dependent for irrigation upon novel water resources, such as desalinated seawater and reclaimed wastewater. Water management is a major topic of research in several departments at the Robert H. Smith Faculty of Agriculture, Food and Environment and in other institutions in Israel.

Now in its second year at the Rehovot campus, the summer course "Irrigation of Agricultural Crops with Recycled and Desalinated Water in the Middle East: Problems and Challenges", under the academic coordination of Prof. Benny Chefetz, is the product of a successful collaboration between the Faculty of Agriculture and the Euro-League for Life Sciences (ELLS), a network of leading universities cooperating in the fields of Natural Resource Management and Agricultural, Food and Environmental Sciences.

This year, students from Germany, Denmark, Spain, Croatia, Sweden, Switzerland, Vietnam, the Philippines, New Zealand and Israel were among the 23 course participants. The course introduced students to legal and technical aspects of water treatment, and to the use of treated water in agriculture, including its effects on soil, crop yield and plant physiology. Potential hazards to human health were also presented. In addition to lectures, the course included discussions with experts, and professional fieldtrips.

Council of Higher Education Program
Summer Program in Plant Breeding & Genetic Engineering

A group of 22 students from China and India joined us at the Hebrew University Faculty of Agriculture, Food & Environment in Rehovot to participate in a special summer program in Plant Breeding and Genetic Engineering. This short-term study program incorporated academic, experimental and cultural elements, and was conducted under the auspices of the International School of Agricultural Sciences in collaboration with the Council of Higher Education in Israel.

The program, academically coordinated by Dr. Yoni Elkind, included two advanced Agricultural Science courses selected from the Faculty's regular course list for their relevance to international agriculture. The first course, Principles of Plant Breeding, introduced the participants to theoretical genetic knowledge relevant to plant breeding, discussed the biological basis of plant genetics, and presented commonly used methodologies and case studies. The second course, Genetic Engineering, covered the basics of the subject, including topics such as manipulation of DNA, cloning and sequencing, mutagenesis and gene synthesis. The Summer Program courses were taught by experienced members of the Hebrew University faculty. In addition to classroom instruction, the students gained hands-on experience and participated in professional field trips to observe practical applications of the course material.

European Cooperation in Sciences & Technology - COST
Molecular and Morphological Identification of Mites Associated with the Red Poultry Mite

Predatory mites are widely used for biological control of plant-feeding mites. We have only limited information, however, on the ecology of acarine predators and alternative prey associated with mites that attack poultry, and the potential of these predators for biocontrol. Studies conducted in recent decades have demonstrated that mites of the families Cheyletidae and Laelapidae prey on the red poultry mite, Dermanyssus gallinae. As these were pioneering studies, we expect that additional species from these families and others will be identified as biocontrol agents of D. gallinae.

This training school, under the academic coordination of Dr. Eric Palevsky of the Ministry of Agriculture and Prof. Yuval Gottlieb from the Koret School of Veterinary Medicine, was aimed at developing the participants' ability to identify mite communities associated with poultry using an integrated approach combining morphological and molecular tools. More than 30 trainees from 15 countries, including Portugal, Spain, Croatia, the UK, Serbia, Italy, and Greece, participated in the training school, held at the Smith Faculty of Agriculture, Food & Environment during the second week of September.

The course also included instruction in slide preparation and species identification with a prepared key, using phase contrast light microscopy coupled with SEM imaging, and DNA barcoding.
Our alumni describe their time at the Faculty of Agriculture as a life-changing experience with regard to their studies and the experience of living in Israel. Alumni of the international MSc programs pursue diverse professional paths after completing their studies; the Hebrew University degree opens many doors for those who wish to continue to a PhD program and for graduates seeking employment in the public and private sectors. The International School is dedicated to maintaining contact with its more than 230 alumni through social media, newsletters, international alumni conferences and webinars, and seed grants awarded for initiating projects in their local communities.

**Alumni Around the World**

“I am a researcher with the CSIR Food Research Institute in Accra, Ghana and have been providing consultancy services to the United Nations World Food Program in Ghana. I am also coordinator of the FRI/CIDA/GAC Africa Rice project in Ghana. In this project, the focus is to enhance food security in Africa through the improvement of rice post-harvest handling, marketing and the development of new rice-based products.”

Hannah Oduro, Ghana, Nutrition 2008

“Studying at the Hebrew University of Jerusalem is an opportunity that rarely comes to many of us from the developing nations and if it was not by kind and generous people like you it would not possibly be realised for me. I am therefore extremely grateful to you and I pledge to do my best using all the avenues and resources available to benefit from this program and to translate the skills and knowledge acquired here into practical aspects that will benefit the community and my country as a whole.”

Joseph Kungu, Uganda, Nutrition 2013

“I was appointed by the Food and Agriculture Organization of the United Nations for the post of District Technical Officer of Livestock. I will be technically assisting the District Livestock Service Office staffs, giving them training and monitoring the project activities. I will be responsible for reporting to the project team leader from the FAO for the project ‘Agriculture and Food Security’ which has been implemented by the Government of Nepal in partnership with the FAO.”

Jayesvar Mahato, Nepal, Animal Sciences, 2014

“Carrying out the exercise in my own community was easier because I was familiar with the environment. I was able to give back to the community and it opened a venue in which I was able to practically apply what I had learned in class. I learned a lot about what goes on in the community and the gaps between theory and actual practices in nutrition. It improved my knowledge skills and experience in community nutrition.”

Janerose Lusweti, Kenya, Nutrition 2015

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The School’s activities and accomplishments are made possible by the generous support and continuing commitment of our donors and collaborators. The International School thanks the following sponsors and organizations for their invaluable partnership.

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- Jonny Fraser Memorial Scholarship Fund (UK)
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- Parasol Foundation Trust (Gibraltar)
- Foundation Marcelle et Jean Coutu (Canada)
- Claude Salomon Scholarship Fund (Mexico)
- Mrs. Isabell Adler (USA)
- Mrs. Evelene Wechsler (USA)
- Moshal Foundation (South Africa)
- MASHAV - Israel’s Agency for International Development Cooperation (Israel)
- ELLS – Euro-League for Life Science
- EWB - Engineers Without Borders
- OLAM
- SID – Society for International Development (Israel)
- COST – European Cooperation in Science and Technology
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The International School of Agricultural Sciences of the Hebrew University of Jerusalem at the Robert H. Smith Faculty of Agriculture, Food and Environment, has offered English-language programs in the agricultural, food and environmental sciences since 1988. As the sole faculty of agriculture in Israel, the Smith Faculty is the source of most of Israel’s agricultural achievements.

More than 3,000 participants from around the globe have attended graduate degree programs, short training courses, and workshops at the International School.

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