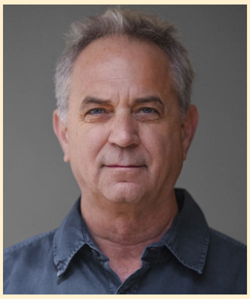
BIDR News

WINTER 2024

"Understanding the secrets of nature will be our greatest endeavor."

David Ben-Gurion,
first Prime Minister of Israel

אוניברסיטת בן-גוריון בנגב
Ben-Gurion University of the Negev



Dear Friends,

As we look toward concluding the first semester of a new academic year and begin a new calendar year, I am honored to share in this newsletter a rich compilation of stories and articles that underscore our commitment to scientific excellence, resilience, and mutual support. The past year has undoubtedly been full of unique challenges to the entire community of the Blaustein Institutes for Desert Research (BIDR), but it has also been replete with achievements, perseverance, and hope.

This edition of our newsletter begins with a heartfelt and detailed tribute to two giants of the Negev, Amos Richmond and Yehiel Admoni, who both left us this past October after long and rich lives of service. These visionaries dedicated themselves to the development of Israel—particularly, the Negev Desert—and the advancement of desert research. They leave behind remarkable legacies that will help shape a better future.

Amid these moments of loss, we have also welcomed an infusion of exciting new energy into our community. Several exceptional new researchers have joined the BIDR, each bringing expertise in critical areas such as plant genetics, water resource management, and the eco-physiology of social insects. Their cutting-edge work has already contributed to solutions for the pressing challenges imposed by climate change faced in desert environments, further enhancing the BIDR's global reputation for excellence.

This year has also seen a strengthening of our international collaborations. Partnerships with Czech and German researchers, supported by the Israel Ministry of Innovation, Science, and Technology, have led to innovative projects in aquaculture, soil moisture modeling, and water purification technologies. These efforts exemplify the power of global cooperation in addressing shared environmental challenges.

In addition to these exciting developments, we also celebrated the success of the 24th Sde Boker Symposium on Solar Electricity Production, which highlighted recent advancements in renewable energy. The event underscored the BIDR's pivotal role in driving innovations that address climate change and promote energy sustainability.

Finally, we celebrated the achievements of our graduates at the Albert Katz International School for Desert Studies. These bright minds, honored with awards such as the Yehiel Admoni Award and the Worms Prize for Excellence, represent the next generation of leaders in desert research.

Amidst these scientific advancements, I want to share the incredible story of Noa Yaffa Kan, a PhD student at the BIDR, and her husband, Yoav Lingwood.

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What they endured reminds us of the importance of resilience and community. Their journey through terrible tragedy to a celebration of love and unity at their wedding is a poignant testament to the strength of the human spirit and the support of the BIDR family.

As we look to the future, we remain steadfast in our mission to foster groundbreaking research, nurture the next generation of scientists, and build a community that embodies the values of resilience, collaboration, and innovation. Thank you for your continued support, which makes all this possible. Together, we will continue to advance the frontiers of knowledge for a sustainable future.

Noam Weisbrod

Warm regards,
Prof. Noam Weisbrod
Dean, Jacob Blaustein Institutes for Desert Research
Ben-Gurion University

Two Negev Pioneers Pass Away Within Days of Each Other

In the span of just a few days, the Negev bid farewell to two of its pioneering visionaries: Amos Richmond, the founding figure of the BIDR's predecessor, the Desert Research Institutes, and Yehiel Admoni, a builder of the state of Israel and pivotal force in settling the country's south. Both lived into their 90s, leaving behind enduring legacies that have shaped the region.

Amos Richmond

The First Professor of Be'er Sheva

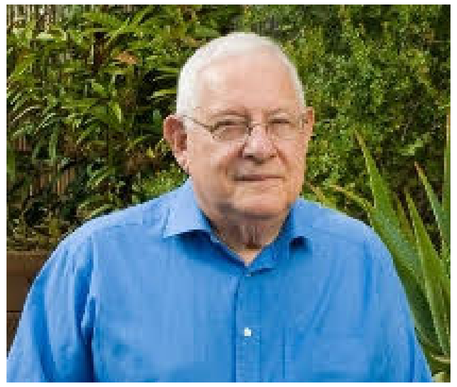
Amos Edwin Richmond, born in Tel Aviv in May 1931, pursued his education at the Reali School in Haifa and the Pardes Hanna Agricultural High School, and later, in the United States, where he earned his PhD in agriculture from Michigan State University in 1963. After postdoctoral work at Purdue University and UCLA, Richmond returned to Israel in 1966, joining the Negev Research Institute in Be'er Sheva, founded by David Ben-Gurion himself. This institute was a precursor to Ben-Gurion University of the Negev, with Richmond among its founding faculty.

"His works, vision, leadership, and fingerprints of Amos Richmond spoke poetry." Richmond during a visit to South Africa, Courtesy of the Richmond family

He served as the Chair of the Biology Department and the Dean of the Faculty of Natural Sciences. He was then promoted to associate professor, becoming the first full professor in Be'er Sheva's history.
In 1974, Richmond was appointed to be the first director of the Desert Research Institute in Sde Boker. Under Richmond's leadership, the institute was reorganized into three specialized centers, focusing on water research, desert agriculture, arid-zone ecology, and renewable energy, constituting BGU's Sde Boker Campus, home of the Jacob Blaustein Institutes for Desert Research. Richmond remained at the helm until 1995, with a five-year break in the 1980s. Today, the campus is a world-leader in dryland research, and its surrounding community—Midreshet Ben-Gurion—hosts approximately 2,000 residents.

A Legacy in Science and Biotechnology

A plant physiologist by training, Richmond was one of the earliest researchers to explore the effects of plant hormones on aging. In 1957, together with his colleague Anton Lang, Richmond described the role of cytokinins in preventing the aging of tobacco leaves—a phenomenon now known as the "Richmond-Lang Effect."



Amos Richmond

Richmond later focused on developing algal cultivation for wastewater treatment and as a source of plant-based protein. His research demonstrated that algae are more efficient than terrestrial plants at converting solar energy into chemical energy via photosynthesis, laying the foundation for Israel's thriving algae-based biotech industry.

In his later years, Richmond lived in a retirement community in Emek Hefer. He passed away on October 9, 2024, at the age of 93 and was laid to rest in the cemetery in Sde Boker—amid the desert sands he loved so dearly.

Yehiel Admoni

The Palmach Veteran Who Made the Negev Bloom

Yehiel Admoni, born in Jaffa in June 1926, was the eldest son of landscape architect Elimelech Admoni and his wife Sima, relocating with his family to Jerusalem in his youth. His younger brother, Nahum Admoni, later served as the head of the Mossad in the 1980s.

In 1944, after high school, Admoni joined the Palmach. In 1946, he helped found Kibbutz Hatzerim in the Negev—one of 11 settlements established on the eve of Yom Kippur, in a coordinated effort to bolster the Jewish presence in southern Israel. Later, Admoni joined Mossad LeAliyah Bet, aiding Jewish refugees from Italy and Austria in their journey to Israel.

He was briefly imprisoned in Cyprus along with refugees onboard the intercepted ship *Lamed Heh Givorei Gush Etzion*, before being released.

Contributing to Israel's Independence Efforts

Immediately following Israel's Declaration of Independence, Admoni joined the arms ship *HaHar*, bringing vital explosives to support Israel during the War of Independence. He completed two additional voyages transporting artillery and aircraft bombs, but his fourth mission was interrupted when he was detained in Italy on smuggling charges. Upon his return to Israel, Admoni officially enlisted in the army, serving as a radio operator in the Southern Command and later as an instructor at the IDF Communications School until his discharge in 1949.

Public Service and Agricultural Innovation

Admoni dedicated his life to public service, beginning as manager of the Jerusalem Corridor region for the Jewish Agency's Settlement Department, later becoming assistant director. In 1961, he led the Joint Training Division, developing advanced training methods, exploring vegetable export potential, and fostering agricultural collaborations with developing countries.

Expanding Settlements and Strengthening the Negev

In the mid-1960s, Admoni studied agricultural economics at Purdue University. Upon his return to Israel, he became deputy director and later general director of the Settlement Department, overseeing the establishment of settlements in the Golan Heights, Jordan Valley, Negev, Arava, and Galilee. By 1977, his efforts had led to around 110 agricultural settlements. Admoni then became the first CEO of AgriDev, a government company focused on sharing Israeli agricultural expertise with developing nations. He also undertook covert Mossad missions, providing agricultural consultancy in countries such as Indonesia, Iraq, and Kurdistan.

Pioneering Development in the Negev and Beyond

Admoni was instrumental in the Jewish Agency's Neighborhood Rehabilitation Program and, from 1987, led the Genesis Fund for Negev Development for over a decade. His leadership sparked numerous projects, including hotels in Mitzpe

Two Negev Pioneers Pass Away Within Days of Each Other (Con.)

Sent on behalf of the Mossad LeAliyah Bet to Italy and Austria to assist in bringing illegal immigrants (ma'apilim). Admoni (on the left) with the "Bricha" team in Austria, November 1947 | Photo: Aliyah Bet and Procurement Website, from the Yehiel Admoni Archive.

Ramon, workforce integration for immigrant mathematicians, three technology incubators, and desert tourism initiatives. For 35 years, he also served on the Jewish Colonization Association (JCA) board, eventually becoming vice president, with a focus on developing the Negev and Galilee regions.

A Lifelong Commitment to Service

In addition to these numerous roles, Admoni served on the Board of Ben-Gurion University of the Negev. Together with Professor Avigad Vonshak, Admoni helped promote agricultural ventures in the Negev and Arava regions, supported by the "Bona Terra" Fund.

In recognition of his significant contributions to the state, the Negev, and settlement efforts, Admoni was awarded an honorary doctorate by Ben-Gurion University in 1998.

Yehiel Admoni

In addition, Yehiel Admoni played a vital role in the early development of the BIDR. His essential contributions included allocating the first scholarships leading to the establishment of the Albert Katz International School for Desert Studies, securing financial assistance from the IKA Foundation to move water and agricultural research to the Sde Boker Campus, and the realization of what is known as the "German loan"—the significant financial support that enabled the construction of modern infrastructure to facilitate the BIDR's scientists' advanced research.
In 2014, the Admoni Prize was established to reward the academic achievements of the BIDR's young researchers and students. This prize has been granted annually, often with Yehiel himself present to honor these outstanding scholars.

On October 5, 2024, Yehiel Admoni passed away at the age of 98 and was laid to rest at Har HaMenuchot Cemetery in Jerusalem. His friend and colleague, Avishai Braverman, eulogized him:

"Yehiel was a rare individual who embodied the spirit of an era long gone—a member of the elite group that surrounded Ben-Gurion. For Yehiel, public service and the good of the state were paramount. He answered every call to duty and lived a life of meaningful action, with integrity and humility."

• The article was originally published on the Davidson Institute of Science Education website, the educational arm of the Weizmann Institute of Science.
[Link]

Ben-Gurion University's 24th Sde Boker Symposium Advances Solar Energy Innovation

The 24th Sde Boker Symposium on Solar Electricity Production, hosted by Ben-Gurion University of the Negev on September 9-10, 2024, was a resounding success. The two-day event, organized by Prof. Iris Visoly-Fisher and Prof. Eugene A. Katz of the Ben-Gurion National Solar Energy Center at the Jacob Blaustein Institutes for Desert Research, brought together over 80 leading experts, researchers, industry professionals, and students from Israel and abroad to discuss recent advancements in solar energy technology. Presentations demonstrated advancements in energy storage; progress in commercial solar and renewable energy initiatives in Israel; grid and system integration with renewable energy; innovative agro-photovoltaics; and developments in perovskite solar cells. The symposium was honored to host the presentations of two pre-eminent keynote speakers: Prof. Doron Aurbach of Bar Ilan University presented cutting-edge battery technologies, and Prof. Antoine Kahn of Princeton University, USA, discussed breakthroughs and opportunities in the development of perovskite photovoltaic materials.

The attendees were particularly interested to learn about Israeli innovations in the industrial production of renewable energy. For example, the Ashalim Solar Power Plant is now supplying a significant portion of Israel's electricity demand, and will provide more as it continues to grow. In addition, participants heard about Apollo Power's development as a profitable business fabricating flexible solar panels; H2Pro's maturing innovative hydrogen production technology; and ICL's Green Sodom project that aims at utilizing Dead Sea resources for improved solar energy conversion. A fascinating analysis of different scenarios with which to combine renewable technologies into the Israeli electricity market concluded this discussion.

The symposium's success was evident in the high level of engagement and collaboration among participants. The poster session, featuring presentations from early-career researchers and students, was particularly well-received, showcasing the next generation of solar energy innovators. It should be noted that the Best Poster Awards this year were named in honor of Adi Vital Kaploun z"l, an exceptional student and remarkable scientist, who earned her MSc in the BIDR's Environmental Physics and Solar Energy Department under the supervision of Muhammad Bashouti, focusing on developing hybrid nanomaterials. Adi was tragically murdered in her home in Kibbutz Holit on October 7, 2023. The organizers hope that these awards serve as a lasting tribute to Adi's memory.

The event concluded with a call to action for increased investment in solar energy research and development, emphasizing the critical role of renewable energy in addressing global climate challenges. As we look towards a sustainable future, the advancements presented at this symposium offer hope for a cleaner, more efficient energy landscape.

Meet the Researcher

Dr. Sofia Bouchebti is a new researcher in the Mitrani Department of Desert Ecology, Swiss Institute for Dryland Environmental and Energy Research. She was born and raised in Morocco, where, from an early age, she knew she wanted to work with animals. After completing high school, she moved to France to pursue university studies in biology. While working on her master's degree, Sofia spent six months in England and, during her PhD research, she performed field work in Brazil for one year under the direction of São Paulo State University. After receiving her PhD from Toulouse III University in France, she was a postdoctoral fellow in two universities in Israel, the Hebrew University and Tel Aviv University, and also held short-term postdoctoral positions in both Spain and Arizona, USA.

Despite her experience in numerous countries and academic institutions around the globe, she believes that Israel is the best for hosting her research. With her strong interest in social insects, Sofia's work lies at the junction of eco-physiology and sociobiology and addresses the important fundamental question of how environmental conditions shape social behavior. In her laboratory, using a comparative approach, she explores the connections between nutrition, climate, and social behavior. Her three main areas of investigation are 1) individual and collective strategies involved in the exploitation of food resources; 2) decision-making processes related to the types of nutrients consumed or collected; and 3) the behavioral, cognitive, and physiological effects of the consumed nutrients. Her studies use the order *Blattodea* (cockroaches) as a model. Though some may cringe at the sight of these insects, Sofia's work has led her to admire the remarkable world of these complex, and often misunderstood, creatures.

Sofia is very happy to be part of the cutting-edge academic community found in the BIDR's Department of Desert Ecology, which she believes stands out for its extraordinary collegiality and outstanding research.

Dr. Tuvia Turkeltaub is a new researcher in the Zuckerberg Institute for Water Research. He was born and raised in Beer-Sheva and attended high school at the Air Force Technical School. Tuvia pursued undergraduate studies in the Department of Soil and Water Sciences at the Faculty of Agriculture at the Hebrew University of Jerusalem and received his PhD from the Jacob Blaustein Institutes for Desert Research on Ben-Gurion University's Sde Boker Campus, specializing in hydrology. After earning his doctorate, he conducted postdoctoral research at Lancaster University, in northwest England.

Tuvia's research focuses on the effects of climate change and land-use alterations on surface water and groundwater resources. Specifically, he investigates how statistical changes in water cycle components, such as rainfall and evaporation, impact the quality and quantity of groundwater and surface runoff.

His recent work has shown that groundwater levels in arid and semi-arid regions are more significantly affected by changes in

average annual evaporation than by fluctuations in average annual rainfall. One of the main challenges he encounters is the variety of climate forecasts, each presenting different statistical changes, which requires him to isolate relevant factors to assess their impact on water resources. Tuvia emphasizes the importance of breaking climate change down into its components and identifying the specific processes that are occurring or are likely to happen, to give each factor greater weight and consideration.

Tuvia has a deep love for the Negev Desert, and is delighted that his passion for research, which began during his undergraduate studies, has ultimately led him to return to the BIDR. Here, he has found an ideal environment in which to both pursue his academic interests and raise a family.

Dr. Gilad Gabay is a new researcher in the French Associates Institute for Agriculture and Biotechnology of Drylands. He was born in Rishon LeZion and attended Gan Nahum High School. He earned his bachelor's degree in life sciences from the Faculty of Agriculture at the Hebrew University. For his master's degree, Gilad studied at Wageningen University in the Netherlands before returning to the Hebrew University to pursue his PhD. He then conducted his postdoctoral research at UC Davis, where he focused on identifying genes and mechanisms that could improve wheat yields under drought conditions.

Gilad's research addresses the urgent need to adapt crops to changing climates, ensuring they can produce enough food to meet the demands of a growing global population. As a plant geneticist, he utilizes classical genetic tools, such as generating near-isogenic lines and segregating populations, to identify the genomic regions affected by rising temperatures and arid conditions. He employs advanced molecular genetics methods to characterize and verify the activity of genes and genetic mechanisms that influence these traits, including gene editing, sequencing genome fragments, and analyzing gene expression across different tissues and developmental stages. Furthermore, Gilad develops and applies sophisticated bioinformatics tools to analyze large datasets, enhancing the understanding and application of genetic insights in agriculture.

Gilad believes that the Negev Desert is the best-preserved area in Israel in terms of nature and open spaces, making the BIDR an ideal location for both his research and his family. With his focus on the environmental influences on plants under conditions of increasing desertification both in Israel and around the globe, Gilad finds that the BIDR is especially well-suited to his research.

FAAB Researchers are Collaborating with Czech Scientists through the Israel Ministry of Innovation, Science and Technology's Czech-Israeli Scientific Research Program

Several researchers from the French Associates Institute for Agriculture and Biotechnology of Drylands are partnering up with scientists from the Czech Republic to pursue groundbreaking research under the framework of the Israel Ministry of Innovation, Science and Technology's Czech-Israeli Scientific Research Program.

The first project is titled "Advancing Grassland Management Through Satellite-Derived Soil Moisture Modeling" which focuses on the fundamental role that soil moisture content (SMC) plays in vegetation growth and agricultural productivity, making its accurate assessment vital for sustainable land management. Researchers Arnon Karnieli (FAAB) and Markéta Potůčková (Charles University, Czech Republic) are breaking new ground in SMC modeling by leveraging data from two cutting-edge satellite systems—Sentinel-2 and Sentinel-1. Their innovative approach promises to refine SMC estimation across grasslands in diverse climatic conditions.

This study capitalizes on the complementary strengths of Sentinel-2's optical capabilities and Sentinel-1's microwave technology to assess surface-level SMC (0–5 cm depth). By integrating data from these systems, the researchers hypothesize that the synergy between optical and microwave data can yield more accurate and reliable models.
At the heart of their work are two sophisticated models. The first, OPTRAM (Optical Trapezoid Model), utilizes vegetation indices and shortwave infrared (SWIR) bands to estimate SMC. The second model, a SAR-based Water Cloud Model (WCM), employs synthetic aperture radar (SAR) data to provide additional insights. By applying these models in two distinct environments—the drylands of Israel and the high mountainous grasslands of the Czech Republic—the researchers aim to evaluate how climate, vegetation cover, and land management influence SMC modeling.

This research has far-reaching implications for agriculture, ecosystem monitoring, and resource management. By enhancing our ability to model SMC, the study offers valuable insights into how grasslands can be managed more efficiently and sustainably, even in the face of climate variability.

Karnieli and Potůčková's work underscores the transformative potential of satellite technology in addressing global challenges in agriculture and environmental management, paving the way for innovative solutions in land-use planning and conservation.

The second project is called "Innovative Research Unveils Dual Approach to Sustainable Aquaculture and Disease Control" and explores a dual-purpose solution to two of aquaculture's most pressing challenges: sustainability and disease control. By utilizing agricultural waste to rear black soldier fly larvae (BSFL), this project seeks to revolutionize fish farming practices and aims to combat a stubborn aquatic disease affecting European carp.

The research, led by Dina Zilberg (FAAB), Inna Khozin-Goldberg (FAAB), and Pavla Sojkova (Institute of Parasitology, Biology Centre, Czech Academy of Sciences), among others, focuses on the transformative

BMBF-MOST: Germany-Israel Cooperation in Water Technology

Several ZIWR researchers are leading projects, along with their German partners, under the framework of the Israel Ministry of Innovation, Science and Technology's cooperation program with Germany's Federal Ministry for Education and Research (BMBF) to focus on water technology. This program specifically addresses a significant environmental challenge: detecting, measuring, and treating PFAS (per- and poly-fluoroalkyl substances) in groundwater. These harmful chemicals pose a serious threat to global water quality, and this project unites researchers from both countries to find innovative solutions.

ZIWR researchers are tackling the problem of PFAS by focusing on three goals. The first, developing advanced sampling and analytic methods, is led by Prof. Avner Ronen (ZIWR) and the Vogel group in Germany. They are developing new methods to detect short- and ultrashort-chain PFAS in groundwater. These techniques aim to make PFAS monitoring more accurate and efficient.

The second team, focusing on improving water purification processes, is led by Prof. Oded Nir (ZIWR) and the Panglisch group in Germany. They are working on advanced membrane technologies, including mixed matrix composite membranes for better performance and hybrid closed-circuit reverse osmosis (RO) systems to improve PFAS removal and water purification. The third team, led by Prof. Ronen and the Panglisch group, is focusing on new coagulation and adsorption techniques. They are developing innovative methods for more effectively removing PFAS using carbon nanomaterials and magnetically separated activated carbon.

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potential of BSFL. These larvae, cultivated on various agricultural waste types, will be analyzed for their growth performance and nutritional composition. The findings could lead to more sustainable feed sources for aquaculture, significantly reducing reliance on traditional fishmeal and its environmental toll.

At the heart of the study is an innovative disease model centered on a myxozoan parasite that currently has no effective treatment. This parasite affects European carp and poses significant economic and ecological challenges to aquaculture operations. The team aims to harness the immunostimulatory and anti-parasitic properties of compounds found in BSFL to develop a novel treatment method.

This pioneering project exemplifies a "win-win" approach by turning agricultural waste into a valuable resource while addressing critical health issues in aquaculture. If successful, the findings could redefine sustainability in fish farming, reduce environmental waste, and improve fish health management, paving the way for a more resilient and eco-friendly aquaculture industry.

ZIWR Professor Mentors the Winner of the Stockholm Junior Water Prize in Israel

Nitzan Ezra

Nitzan Ezra, a high school student mentored by Prof. Zeev Ronen (ZIWR) in the Jusidman Science Center for Youth's Alpha Program for Scientific Research, was named the winner of the Stockholm Junior Water Prize in Israel.

This year, 37 projects focusing on water resources and their conservation competed for this honor. A total of 67 students from 26 schools across the country, representing diverse communities and sectors, submitted their research.

Nitzan, a recent graduate of Makif Alef High School in Beersheba, won the prize for her excellent research project, titled "Growth-Enhancing Bacteria Adapted to Plants Coping with Salinity Damage Caused by Irrigation with Brackish Water." The judges praised her work for its thoroughness and depth, as well as the exceptional professionalism and expertise she demonstrated during her presentation. Her research addresses two critical global challenges, the water and nutrition crises, and represents a significant step toward viable solutions.

This prestigious award earned Nitzan a spot in the International Stockholm Junior Water Prize competition, where she proudly represented Israel. Nitzan and Prof. Ronen traveled to Stockholm this past August to attend the event organized by the Stockholm International Water Institute during World Water Week, under the auspices of the Swedish Royal Family. The global competition is one of the most esteemed awards for young researchers in the field of water, offering cash prizes of up to $20,000, presented by Crown Princess Victoria of Sweden. While Nitzan did not take home the prize in Stockholm, she was a wonderful representative of the up-and-coming generation of scientists found in Israel and the BIDR.

Celebrating Excellence at the Albert Katz International School for Desert Studies Graduation

On September 18, 2024, the Albert Katz International School for Desert Studies at Ben-Gurion University of the Negev hosted its annual graduation ceremony at the beautiful Sde Boker Campus. This event brought together students, faculty, and the wider BIDR community to honor the achievements of its outstanding graduates.

This year's ceremony highlighted the significant contributions of students and researchers who have excelled in their studies, research, and innovations, particularly in addressing critical challenges in arid and semi-arid environments.

Honoring Excellence

The Yehiel Admoni Award, named after a distinguished figure in desert research whose life and passing are featured elsewhere in this newsletter, was presented to several accomplished members of the BIDR community:

- Dr. Tarin Paz-Kagan and Dr. Elad Levintal, BIDR researchers, were recognized for their exceptional contributions to advancing desert science.
- Singiri Jeevankumar Reddy, a PhD student, was recognized for his innovative research.
- Abedallah Abu-Backer, an MSc student, was recognized for his commitment to his field, exemplifying the institution's values.

Worms Prize and Distinction Awards

The Worms Prize and Distinction Awards, presented in memory of Gérard Worms, former Director of the French Associates of Ben-Gurion University of the Negev, were awarded to graduates demonstrating remarkable dedication and achievement:

- The Worms Prize for Excellence was awarded to PhD student Siyao Qi in recognition of exemplary academic performance and research output.
- The Worms Distinction Awards were presented to PhD students Uttam Kumar and David Sampson Issaka, honoring their significant accomplishments.

A Legacy of Impact

The Albert Katz International School for Desert Studies has long been a hub for fostering interdisciplinary research and cultivating the next generation of desert studies leaders and researchers. The graduates celebrated at this event represent a global cohort dedicated to solving critical environmental challenges through innovative science and collaboration.

Congratulations to all the graduates and award recipients for their hard work, perseverance, and outstanding contributions to desert research!

Love and Resilience: One Student's Story

Noa Yaffa Kan and Yoav Lingwood Wedding in Ein Gedi

Noa Yaffa Kan, a PhD student in Ecology and Nature Conservation at the BIDR, is exploring the relationship between water source distribution, behavior, and genetic diversity, using the Asiatic wild ass population in the Negev Desert as a case study. Her doctoral work is supervised by the SIDEER's Shirli Bar-David and Amos Bouskila. On October 6, 2023, Noa was happily planning her wedding to Yoav Lingwood, a student in BGU's Earth Sciences Department. The couple planned to marry in just a few days at Kibbutz Be'eri where Yoav's family is from, and Noa and Yoav spent the day visiting his family and finalizing wedding plans, spending the night in the young residents' neighborhood of the kibbutz.

Tragically, the following day, October 7, 2023, Kibbutz Be'eri was the target of a devastating terrorist attack. Fortunately, Noa and Yoav escaped unharmed from the horrifying invasion and massacre. Along with the other survivors, Noa and Yoav were evacuated to a hotel near the Dead Sea. Amidst the heartbreak, a volunteer who learned of their story suggested that they hold their wedding in Ein Gedi. On October 20, 2023, Noa and Yoav celebrated their wedding in a memorable ceremony. Noa recounted later, "We hadn't even considered that option, but after consulting with our family and friends, everyone encouraged us to go for it. Everyone rallied to make it happen: the spa at the hotel where the wedding was held and even all the vendors we had worked with for a year and a half agreed to contribute their services for free. The most special moment was when the band Lola Marsh performed at the wedding and sang our chuppah song. In a joyful and emotional moment, we celebrated our love alongside the Be'eri community, giving the wedding an added meaning of unity, resilience, and Zionism. We felt so loved and embraced—it was the most amazing day of our lives. The wedding showed how, as a people, we know how to rise and grow even from the most horrific tragedies, strong and united!"

Noa also expressed profound gratitude for the support she and Yoav received from the BIDR community during their recovery. "For us, the BIDR is our home and the people here like family to us. After October 7th, people from the entire campus and Midreshet Ben-Gurion offered us help and support in all aspects—academically, socially, psychologically. We are extremely grateful. I don't know how we would have recovered without the support of the amazing people of this campus."