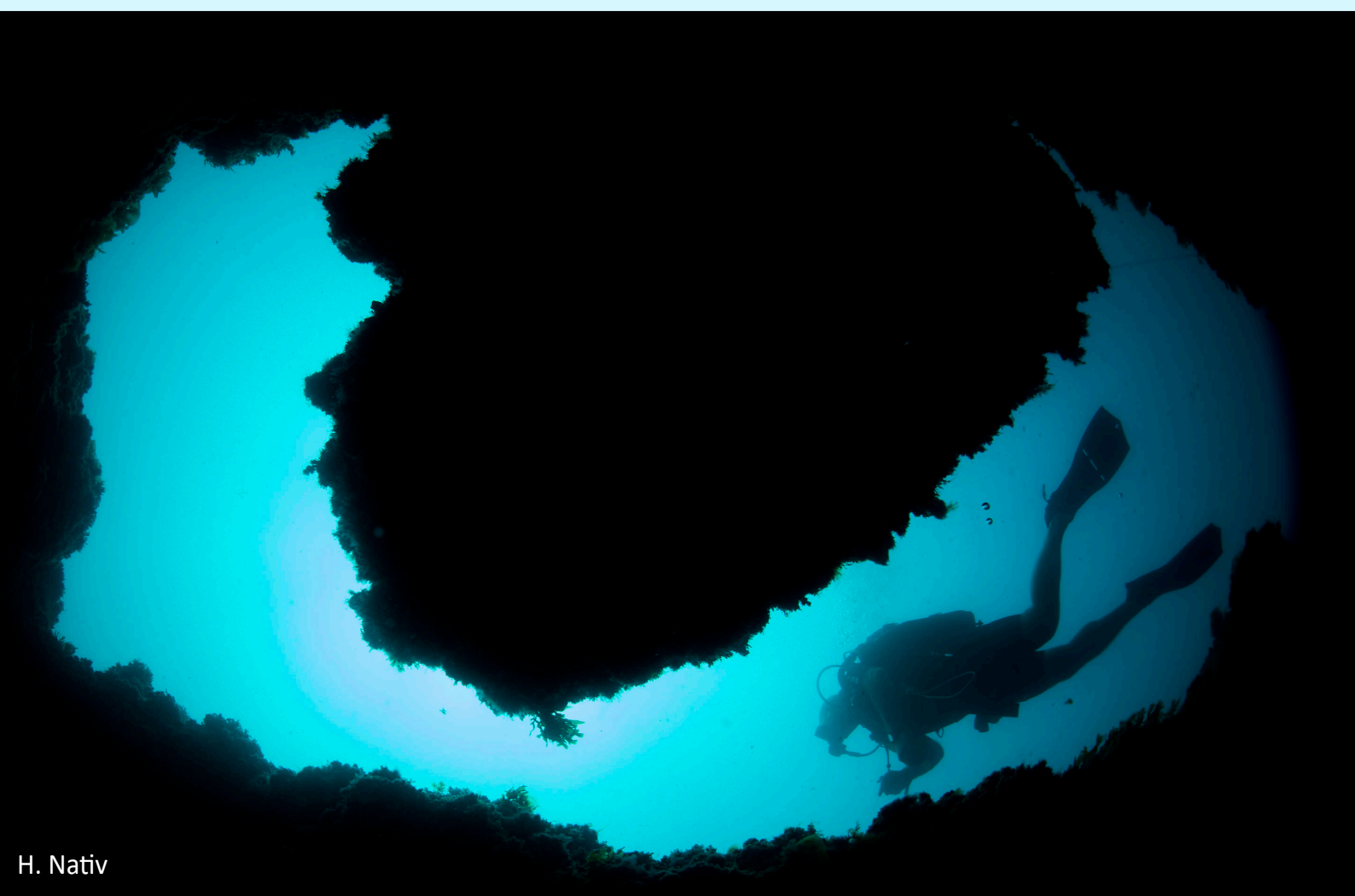


The Department of  
Marine Biology

# Alumni newsletter

Keeping in touch with the Marine Biology  
Department after you graduate



H. Nativ

July 2022



LEON H. CHARNEY  
SCHOOL OF MARINE SCIENCES

בית הספר למדעי הים על שם ליאון צ'רני



Dear students, colleagues, alumni and friends,

I am happy to share with you our latest newsletter, which has become somewhat of a tradition. For me, this edition is very special, as it is also my fifth and last year as head of the department. I look back at the progress we have made with pride and satisfaction. We have grown to 90 students, with 17 MSc students and 12 PhD students enrolling in our programs this year alone. Our program has become international and we have students from all over the world, including Italy, Germany, Portugal, Czech Republic, Denmark, Norway, England, India, Ghana, China, Russia, Peru and USA. Nevertheless, our open door policy has not changed and we keep an intimate, supportive and respectful environment. Our curriculum has improved over the years, with more hands-on courses and field trips. In addition, most of our faculty members were promoted in recent years to associate professors. I take this opportunity to congratulate Prof. Danny Tchernov, who has been promoted to full professor.

Most importantly, this year the Leon H.Charney School of Marine Sciences became an independent academic unit of the University of Haifa. This was recommended by an international committee nominated by the Israel Council for Higher Education during my first year as head, so from a personal perspective, this is the perfect closure for me. This major change, which aligns with the vision of the school to become a leading interdisciplinary research institute, was made possible by our continuous dedication and teamwork. We thank the management of the University of Haifa for taking this important step. The new status of the school will fuel our growth, enabling us to advance our marine facilities and to become a globally recognized center of scientific excellence. I expect that in the coming years, our department will expand to 15 faculty members, creating more international collaborations and increasing our impact on the field. Already, our works are published in top-tier journals with our students as first authors. All this could not happen without the professional contribution of our lab managers and technicians, which creates and reflects an atmosphere of high motivation and enthusiasm.

I am very proud of our students, who not only excel in their research, but also contribute to society by giving workshops and lectures to the general public, mostly to school-age children and teenagers. Some examples of these endeavors you will find in the following. Additionally, many students from our department contributed to the organization of the 9<sup>th</sup> Haifa Conference in Marine Sciences, whose theme this year was Climate, Ocean, Change.

Our students were also at the center of our 8<sup>th</sup> annual academic meeting, which included excellent lectures and poster presentations. We also had a guest lecture by Prof. Ofer Arazy, who talked about innovation and sustainability at the University of Haifa. Finally, at the end of the meeting, we enjoyed a spontaneous dancing celebration.



*Field trip to the rehabilitated Kishon park*





**We appreciate our students who helped organizing the meeting: Claudia Ferreira, Daniel Goloe, Debi Ramon, Elena Bogdanova, Iris Preiss, Prashant Tewari and Tal Ben-Ezra.**

We are very pleased to accept to our department Dr. Igal Berenshtein, who will join us next year as a new faculty member. Dr. Berenshtein is coming from the University of Miami, where he held postdoctoral positions first at the Rosenstiel School of Marine and Atmospheric Science (RSMAS) and then at the Cooperative Institute for Marine and Atmospheric Studies (CIMAS). He is a quantitative marine ecologist that combines advanced modeling techniques, data science, and empirical field and laboratory studies to tackle fundamental scientific and environmental questions concerning the marine environment. His research will support effective management of marine resources, and will facilitate prediction and mitigation of key threats endangering our marine ecosystems. Welcome Igal!

It has been an honor to serve as head department and I highly appreciate the support of my colleagues and the assistance of the administrative staff of the school. I am happy to pass the torch to the new head, Prof. Smadar Ben-Tabou De-Leon. I am sure that she will lead the department forward to new heights and horizons and I wish her all the best.

Finally, those of you who have moved on to new pastures, please continue to share with us your stories and experiences.

Wishing you all a great summer,

Prof. Tamar Lotan



*Congratulations to our new PhD's*

*Maya Britstein, Ilia Burgsdorf, Tamar Leshem, Miri Morgulis and Maayan Neder.*



Dear Students, faculty, graduates, and all our friends from near and far,

I am happy to open this summer edition of the Marine Biology Department Newsletter with some good news as we are in the midst of graduation ceremonies. I would like to add my congratulations to all the recent MSc and PhD graduates that have worked hard and produced excellent research that is summarized in your theses and published scientific papers. This year's graduation ceremonies were especially special occasions for us. It is the first year that we are academically independent and that the School of Marine Sciences and its graduates are recognized under the umbrella of Marine Sciences and not one of the other faculties - with Marine Sciences stated clearly on our graduate diplomas. As was the vision of the School's founders – we are now en-route to become the 7<sup>th</sup> Faculty of the University of Haifa – and already today we are the largest academic center of marine sciences in Israel with ~75 academic faculty and staff and ~200 graduates and post-doctoral fellows. As part of our strategic development plan, we have begun working on expanding and establishing a new department and MSc program. The Department of Sustainable Aquaculture and Blue-Tech will work closely with the Department of Marine Biology to train the next generation of scientists needed to find new sources of protein and other natural products from the sea and develop them in a sustainable manner to the environment. We are also busy finding a new physical location that will house our growing School.

My congratulations to all faculty, staff, and students for finishing another academic year. To those of you graduating and going off to post-docs or the new paths off the academic-track – We wish you good luck in your future path and hope to keep in contact and see you here often. To our friends from near and far, we hope that our new academic status, reflecting the University of Haifa commitment to develop marine sciences, will stimulate your continued support as we move ahead to make the Leon H. Charney School of Marine Sciences a center of excellence to tackle the challenging issues facing our world today.

Enjoy the summer,

Prof. Ilana Berman-Frank



**Congratulations to Tom Reich**, a PhD student, for winning the cool paper award of The Charney School of Marine Sciences for his article “A year in the life of the Eastern Mediterranean: Monthly dynamics of phytoplankton and bacterioplankton in an ultra-oligotrophic sea” (*Deep Sea Research Part I: Oceanographic Research Papers* 182 (2022): 103720).



## Collaborating for Change in the Enchanted Islands

### Visit of Dr. Tal Luzzatto-Knaan and Prof Tali Mass to Galapagos

In February 2022, we participated in the first of its kind “International Symposium Galapagos-Israel 2022”, which was held in the Islands of Santa Cruz and San Cristobal, Galapagos, Ecuador. In this event, twelve Israeli scientists from seven universities in Israel arrived at the Galapagos with an aim to strengthen scientific collaboration between the academic sectors of Ecuador and Israel on issues of relevance to the Galapagos, such as evolution, environment, genetics, climate change, food security, invasive species, and sustainability. During this visit, we explored the amazing marine life of the Galapagos Islands, developed ideas for future collaborations and established scientific relationship. We hope to see future exchange of students between Ecuador and the University of Haifa.

The Charles Darwin Foundation (CDF) and the University of San Francisco-Quito (USFQ) hosted this symposium in collaboration with Tel Aviv University. The meeting was also supported by the Ambassador of Ecuador in Israel, Ms. Helen Deller Klein, and the Ambassador of Israel in Ecuador, Mr. Zeev Harel.



*Hammerhead sharks in the Galapagos*

**Congratulations to Dr. Tal Luzzatto-Knaan**, who was chosen this year for the “Homeward Bound” International Women in STEMM Leadership Initiative. She will participate in leadership workshops as well as in a three-week expedition to Antarctica.







*Yara Soussan, Tzvia Gildo and Daniel Sher talking science with 5<sup>th</sup> grade students*



*Tzipora Peretz talking about research at sea with 7<sup>th</sup> grade students*



*Eli Shemesh demonstrating coral structures*



*Alhan Abu Hamoud teaching about the sea and climate change*

## Outreach activities by the members of the Marine Biology Department

Prof. Daniel Sher

Being a marine biologist is exciting. Every time you perform an experiment or sample out at sea you learn something new about the world, its oceans and the organisms living in them. How can we share this excitement with others? Can this scientific knowledge help inform public behavior and policy? Can we motivate the next generation of scientists? Doing this requires a strong engagement between our school (students, researchers, administrators) and people outside of it across all of the communities living in Israel.

There are many such “outreach” activities taking place at the Charney School of Marine Sciences. Here, we highlight two of them, one led by Yara Soussan, an MSc student at the MCE lab, and the other led by Alhan Abu Hamoud, an MSc student at Prof Laura Steindler Lab.

Yara worked with 5<sup>th</sup>-graders from the “Achva” school at Wadi Nisnas in Haifa, guiding them through a 10-meeting program on the oceans, their denizens and the threats they are facing. She also took them on two field trips to the Shikmona reserve, where they learned about the rocky reef through an ecological survey (although most of the time the children’s enthusiasm and excitement meant that scientific rigor might have been forgotten... see Figure 1). Finally, the children visited the university to see the labs and culture rooms, learn about the scientific equipment used, and also visited the ancient ship at the Hecht Museum. The program was run in collaboration with two NGOs, EcoOcean and “Tovnot Bachinuch” and with assistance from the Hecht Museum staff, from Daniel Sher and Tzvia Gildor from our department and from Michael Lazar from Marine Geosciences. We are looking forward to many more projects like this one!

Alhan Abu Hamoud takes part in a program name “I am for the sea” ([www.iftsea.isees.org.il](http://www.iftsea.isees.org.il)), which is dedicated to increasing the awareness to plastic and microplastic contamination at sea. The project involves four schools from the Arab sector that met with Elhan for fascinating lectures on the importance of the sea. The program was initiated by the late photographer Ziggy Livnat together with Zavit in Education initiative of the Israel Society of Ecology and Environmental Sciences.



## Functional Metabolomics and Marine Natural Products

Dr Tal Luzzatto-Knaan

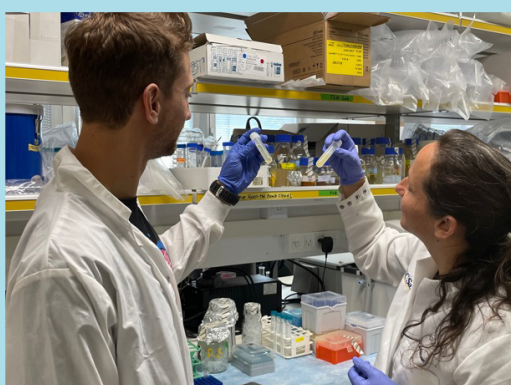
Our lab studies a wide array of questions, with a common thread across all projects, trying to characterize and understand the functional role of natural products.

Natural products are small molecules produced by an organism and have various biological roles in nature. Some serve as regulators of cellular processes, some as communication signals and some as defensive molecules that may be utilized in agriculture, biotechnology and medicine. Natural products have an incredibly long history. Traditionally, natural products from plants, animals and microorganisms were the source of virtually all medicinal treatments from folklore and tribal medicine to the era of antibiotics. The marine environment is highly prolific and a treasure trove for novel chemistry for potential drug discovery that is largely understudied. We use a functional metabolomics approach to explore the spatial and temporal patterns of small molecules to better understand their functional role in marine biological systems. This approach includes the characterization of the chemical space, the targeting of specific molecules to the biosynthesis and regulation.

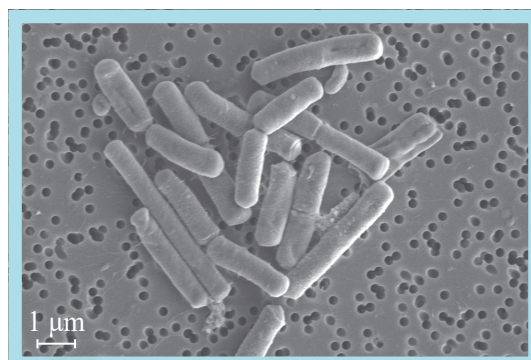
Microbes - have an immense effect on the wellbeing of virtually all living organisms. Microbes are highly social and exist in complex communities with thousands of other organisms, where they engage in a myriad of interactions that are mediated by the exchange of molecules. The marine environment is home to countless unexplored interactions and thus unexplored chemistry. Mining the chemistry in marine microbes is in the frontline of bioprospecting for the next generation of antibiotics. We apply mass spectrometry-based metabolomics, transcriptomics and genomics to correlate the chemotype to phenotype for the discovery of compounds and new biological functions. These projects, which are led by Dr. Nataly Barger and the recently graduated Master, Shai Zaid, highlighted the various functions of the key stone molecule surfactin in Firmicutes as well as their crosstalk and impact on other natural products. This work is supported by the Israel Science Foundation (ISF).



*Nataly and Omri sampling algae at Achziv*



*Shai growing microbes*



*Scanning electron microscopy of surfactin producing Firmicutes Bacillus subtilis (Image by Shai Zaid and Dikla Aharonovich).*





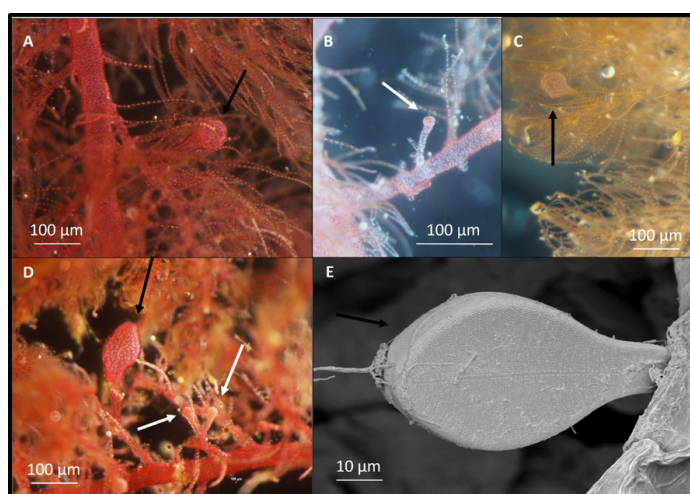
Algae quadrat at Achziv shore



Marine algae and plants - Like land plants, marine plants are considered an overwhelming source of natural products, which act to protect and benefit the plant to thrive in its environment. However, marine plants are less explored in this context. Marine plants such as algae (blue-green algae and seaweeds), seagrasses and mangroves also have an immense ecological role as primary producers in oceans; therefore, understanding their metabolomic capacity is of great interest. The composition of natural products is very much dependent on the environmental conditions in a given niche. Hence, key interesting questions are: What natural products are produced? When and where are they expressed? What are their biological/ecological roles? And, how can we benefit from them?

Several ongoing projects address these questions. A project led by Omri Nahor explores the seasonal variation and biological activity of natural products in the red algae *Asparagopsis taxiformis* and its associated microbes. This invasive species is becoming very abundant in the Eastern Mediterranean, affecting the local flora and fauna. Omri's work has been tracking the invasion route of unique lineages of *Asparagopsis* using DNA barcoding. Nasrin Fares Amer explores the activity of natural product from algae in various gastrointestinal cancer cell lines, aiming to understand the molecular mechanism of action by both molecular and analytical approaches. Itai Kolsky is developing the agrotechnology for maximizing yield of marine algae products of potential industrial value and Mirna Kaloush is exploring the application of marine natural products in processes of the cosmetic industry.

Fascinated by the diversity and richness found in the marine environment as a resource and inspiration for new applications, we also aim to understand the ecological context and role of molecules in algae - microbe interactions, and how they are affected in the Anthropocene.



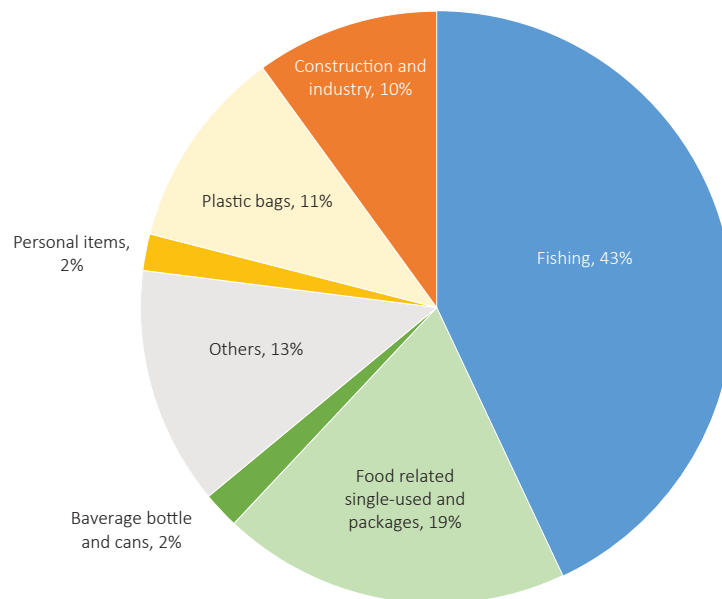
Fertile *Asparagopsis taxiformis* from the (A-D) light microscope. (E) scanning electron microscope (SEM). Cystocarps (which indicate the development of the gonimoblast, the female reproductive structure) are shown with black arrow heads and spermatangium (male reproductive structure) by white arrow heads. Images by Omri Nahor and SEM by Dikla Aharonovich.



## Oceans Day

This year's United Nations World Oceans Day, on June 8 2022, highlighted the theme "Revitalization: Collective Action for the Ocean".

Dr. Ziv Zemah-Shamir organized a special beach and diving cleaning together with many of our students and PIs and with the assistance of Eran Rozen, our diving officer, and the team of Morris Kahn Marine Research Station. The initiative was carried out in collaboration with the Israeli Diving Federation and Dr. Galia Pasternak, who summarized the data on collected marine litter.



*Main categories of collected marine litter in Sdot Yam, analyzed by Dr. Galia Pasternak*

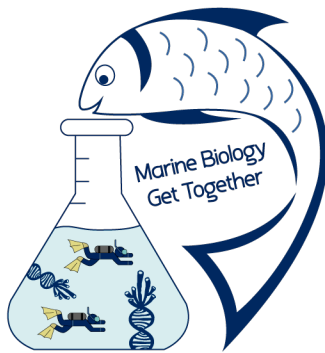


H. Nativ





**Congratulations to Prof. Tamar Lotan**, whose research on GABA<sub>B</sub> receptor signaling in the sea anemone was chosen to be shown in a gallery exhibition in Haifa.



*Designed by Cláudia Ferreira*

## 8<sup>th</sup> Academic Get-Together

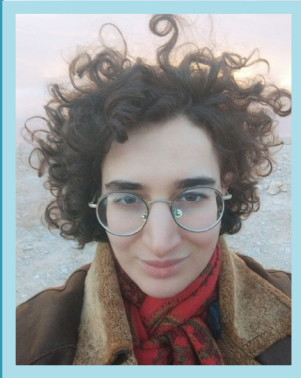
The 8<sup>th</sup> academic meeting of the Department of Marine Biology took place at the University campus. It was attended by 80 PhD and MSc students, postdoctoral fellows, principal investigators, research fellows and scientists. The meeting included lectures by students from different research groups and a guest lecture by Prof. Ofer Arazy, who talked about innovation and sustainability at the University of Haifa. In addition, 41 students presented their projects in two poster sessions. The winner of the Get Together logo competition was Cláudia Ferreira, whose beautiful logo decorated the mugs for the meeting. At the end of the meeting, before prizes were awarded to the three best talks and posters, we had an enjoyable unplanned dancing celebration.





## Outstanding talk awards

### Elinor Nadir



I am a PhD student at the labs of Professor Yehuda Benayahu (University of Tel Aviv) and Professor Tamar Lotan (University of Haifa). I presented my research on using regeneration to understand the mechanism of pulsation in the soft coral *Xenia umbellata*. This fascinating coral possesses a hypnotic pulsation motion that has fascinated scientists since Lamarck. Like most repetitive motions in animals, pulsation is controlled by a central pattern generator (CPG), a 'pacemaker' composed of small neural circuits. Studying CPGs in 'simple' animals can provide much information on neural control of behavior, and *X. umbellata* has never been researched for this purpose. Using the remarkable regeneration abilities of this animal, we have developed a series of experiments to discover how the CPG works. We are now investigating the transcriptome of the regeneration process in order to decipher the molecular processes involved in pulsation.



*Xenia culture*

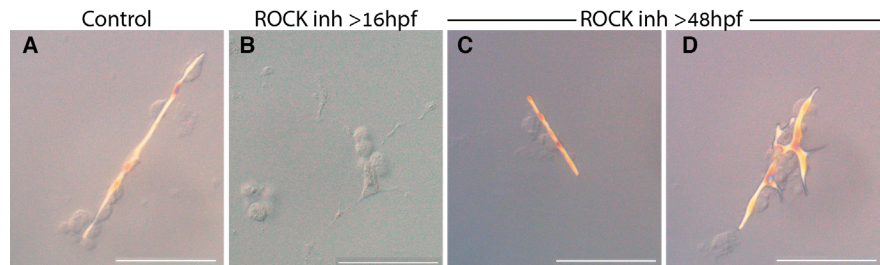
### Majed Layous



How does a single cell become a multicellular organism? How does the genetic code drive morphogenesis? How do environmental factors affect the outcome of genomically encoded developmental programs? My curiosity about these questions fostered my desire to join the laboratory of Prof. Smadar Ben-Tabou de-Leon, where I investigate the molecular mechanisms that control developmental processes.

In the lab, we use sea urchin embryo as a model system to study the regulation of developmental processes. We study how gene regulatory networks and cytoskeletal remodeling dynamics control sea urchin skeletogenesis. Specifically, I focus on how the key cytoskeletal remodeling protein, Rho-

associated protein kinase (ROCK), and environmental stiffness regulate skeletal growth and morphology *in vitro*, in a skeletogenic cell culture. In my research, I use high-resolution and live-imaging microscopy to study the dynamics of skeletal elongation. My studies show that both ROCK and substrate stiffness play important roles in skeletal elongation and morphology *in vitro*. I hope that my work will illuminate the molecular mechanisms that sense the environmental stiffness and translate it into the modulation of skeletal morphology and skeletogenic gene regulatory network.

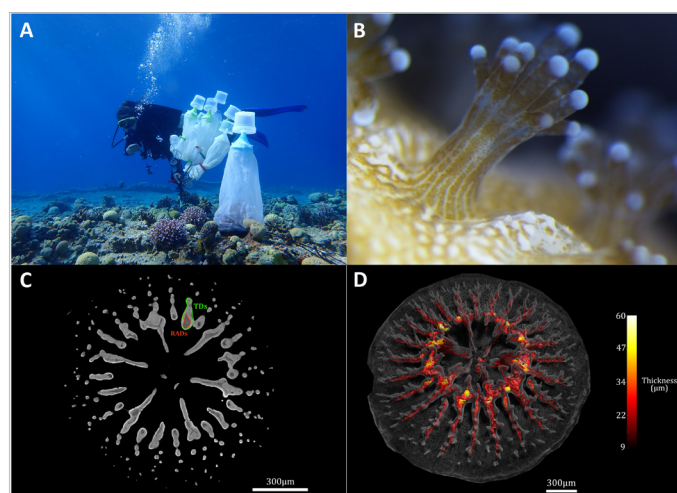


The effect of *in vitro* ROCK inhibition. (A) Linear skeletal rod in control skeletogenic cell culture. (B-D) Inhibition of ROCK activity. (B) Inhibition of ROCK activity before spicule formation (at 16 hpf) completely blocks spiculogenesis. (C) Addition of ROCK inhibitor after spicule rods were formed (at 48 hpf) reduces spicule elongation. (D) Spicule rod in ROCK-inhibited skeletogenic cell culture shows a branched phenotype. Scale bars represent 50  $\mu\text{m}$ .

## Federica Scucchia



I'm a third year PhD student at the Coral Biomineralization and Physiology Lab of prof. Tali Mass. My research is focused on the response of juvenile and adult stony corals to decreasing oceanic pH. In particular, I examine changes occurring in coral skeletal features at the microstructural level to better understand the response of these organisms to ocean acidification. For this purpose, I use a combination of X-ray tomography and artificial intelligence to reconstruct and quantitatively analyze in 3D the internal skeletal network of corals.



(A) Collection of coral larvae from the coral reef in Eilat using larval traps. (B) Microscope image of a polyp of the coral *Stylophora pistillata* from the Red Sea. (C) Tomographic cross-sectional slice of a coral recruit skeleton, highlighting different skeletal domains, namely rapid accretion deposits (RADs) and thickening deposits (TDs). (D) Artificial intelligence-based segmentation of RADs and TDs across the entire recruit skeleton, showing fine details of local thickness (color-coded in  $\mu\text{m}$ ) within RADs.



In the last decades, we have witnessed a significant decline in coral reefs all over the world and, as global climate changes are becoming more severe, the need to protect coral reefs is becoming urgent. Hence, applying materials science methods to structural research in corals would be of great benefit for the development of highly targeted restoration strategies, as it would critically expand our knowledge on the effects of environmental change on coral skeleton development.

## Outstanding poster awards

### Shira Givati



I joined Haifa University about 5 years ago, as a master's student under the supervision of Prof. Daniel Sher and Dr. Eyal Rahav (IOLR). My PhD is a continuation of my MSc thesis, in which I study how different environmental factors, such as temperature, light and phage infection, affect the macromolecular composition of bacterial cells. In my research, I work both with laboratory cultures of the bacterium *Alteromonas* and cyanobacterium *Prochlorococcus* and with natural communities in the ocean. Currently, I am in the final stages of writing an article based on my poster results, which show the effect of temperature on resource allocation in bacterial cells. Also, I am working on my second chapter, which deals with phage infection and how it affects the macromolecular composition and lysis byproducts of *Prochlorococcus*.



*A mesocosm experiment at IOLR that examines the response of the natural microbial community to different temperatures under controlled conditions.*

## Yara Soussan



I was first introduced to this field when I joined Prof. Daniel Sher's lab as a B.Sc. student working on a research project. I then continued as a master's student in the lab starting October 2021. The concentrations of nutrients in the sea play a critical role in the survival and function of all organisms. The focus of my study is to determine how the availability of nutrients affect the growth of cyanobacteria using *Prochlorococcus*, a globally abundant cyanobacterium, as a model.

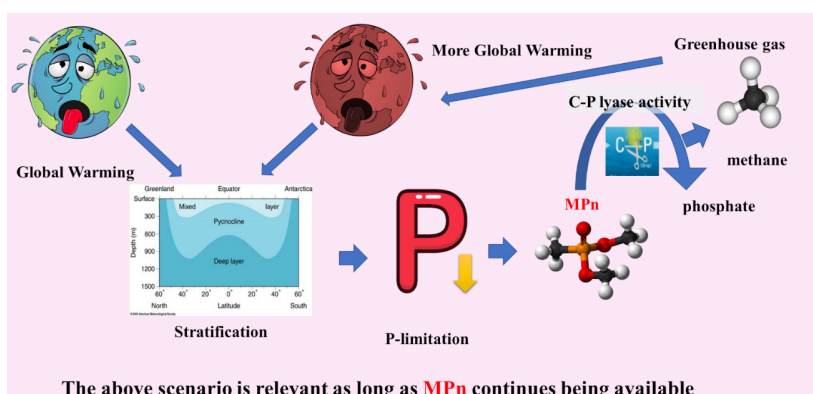
One of the highlights of my journey is sharing my knowledge, trying to influence and communicate the importance of protecting our marine environments to others. Thus, I am taking part in different outreach activities with groups of fifth grade and high school students, where we learn how to preserve our sea. The picture below was taken during one of the activities, where I taught about sand along with Michael Lazar, Daniel Sher and Tzvia Gildor.



## Alhan Abu Hamoud



I am doing my master's in Prof. Laura Steindler's lab, which focuses on marine microbiology. My research project is on marine bacteria from the SAR11 group, which are the most abundant bacteria on Earth. We investigate if SAR11 plays a role in global warming via methyl-phosphonate (MPn) biosynthesis, a source of phosphate for bacteria when inorganic phosphate is limited. Interestingly, when methyl-phosphonate is degraded, both inorganic phosphate and methane are released, and methane is a potent greenhouse gas. Greenhouse gases are causing an increase in temperature that causes ocean stratification, which in turn results in phosphate limitation and further methyl-phosphonate degradation. We postulate that some SAR11 strains are responsible for most of the methyl-phosphonate biosynthesis in the ocean. Our aim is to test this hypothesis and to determine which environmental conditions trigger methyl-phosphonate biosynthesis.





**Congratulations to PhD students Noga Barak and Ximena Dubinsky Velasquez** for receiving the fellowship awards from the Mediterranean Sea Research Center of Israel.

## Where are they now? Our alumni today

**Tal Elmaliach:** Ecologist in Netanya municipality



I finished my MSc in 2019 in Dan Tchernov's lab, where I wrote my thesis work on bluefin tuna in the Eastern Mediterranean Sea. I was lucky to be the first MSc student in the Morris Kahn Marine Research Station in Sdot-Yam. As a part of the Marine Apex Predator team, I helped establishing initial big fauna research protocols and data base. After finishing my thesis, I began working as a project manager in the marine unit of the Nature and Park Authority. During this time, I managed a cross-organizational team that worked with Hadera municipality to find sustainable solutions for the sharks' aggregation site at the Orot Rabin Power plant. In 2020, I began working as head of the ecology department in Netanya municipality, managing the city open spaces and nature reserve. Even though this was my first time "outside" the sea, I found myself using a lot of techniques, knowledge, and connections I acquire during my studies: planning and leading field surveys and data sets, creating monitoring protocols and dealing with invasive species. After two challenging years in this amazing job, I'm currently finishing my maternity leave with my second child and getting ready for our next family adventure as we're relocating to Colorado, USA for a few years.

**Dr. Eduard (Eddie) Fadeev:** Postdoctoral research fellow, University of Vienna



My MSc studies at the Leon H. Charney School of Marine Sciences allowed me to acquire multiple scientific skills and exposed me to the international scientific community. The established portfolio strongly contributed to my acceptance as a PhD candidate at the prestigious International Max Planck Research School of Marine Microbiology (MarMic). During my PhD research at the Max Planck Institute for Marine Microbiology and the Alfred Wegener Institute for Polar and Marine Research (Germany), I have participated in several polar expeditions and investigated microbial dynamics in the Arctic Ocean and the effect of ongoing climatic changes on Arctic marine ecosystems. Currently, I am a postdoctoral researcher at the University of Vienna (Austria), focusing in my research on large-scale biological phenomena in the ocean that are associated with interactions between marine microorganisms.



**Dr. Kumar Saurav:** Junior group leader at Centre Algatech, Institute of Microbiology of the Czech Academy of Sciences in Czech Republic

My research focus is to identify novel compounds with antimicrobial properties in cyanobacteria secondary metabolites. We aim to comprehensively study the compounds starting with their isolation, followed by bioactivity-guided purification and resulting in a detailed characterization of their properties, functions, and biosynthetic pathways.

During my post-doctorate at the Marine Microbiology Lab, under the lead of Prof. Laura Steindler, I explored quorum sensing and its inhibition in sponge-associated microbes towards the development of alternative drugs. The study also provided novel insights into how sponge-microbe symbiosis is maintained within the incredible diversity of symbiotic bacterial groups. This led me to acquire comprehensive skills that allowed me to design an innovative interdisciplinary approach of studying symbiosis beyond the basic relationship status and applying it in the drug discovery process. Professionally, collaboration with my former lab members remains one of my most important partnerships for multiple ongoing projects, and provides new possibilities greatly complementing my current lab. The patience, advice and great ideas of my advisors helped me reach professional maturity towards the establishment of my own group. To this day, I keep close contact with my former lab members, colleagues, and the people in the department and I consider them as family.



**Congratulations to Dr. Shany Levy** for winning the Marie Skłodowska-Curie Postdoctoral Fellowship to study with Prof. Arnau Sebé-Pedrós in the Centre for Genomic Regulation (CRG), Barcelona Institute of Science and Technology (BIST), Spain.



**Congratulations to Yaly Mevorach** for winning the Dean Award of Excellent MSc Thesis for her research titled “Population dynamics of the common and bottlenose dolphin populations along the Israeli coastline” under the supervision of Prof. Dan Tchernov and Dr. Aviad Scheinin. Yaly continues her research on sperm whale societies in her PhD studies under the supervision of Prof. Tchernov and Dr Shane Gero from Carleton University, Canada.



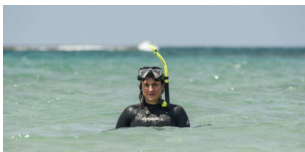
## Selected popular interviews and reports (click the image for the link):



מהקטבים ועד חיפה: המשמעות של שינויי האקלים והאוקיינוסים על חיינו



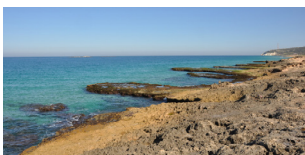
סטודנטים מאוניברסיטת חיפה יצאו לנקות את קרקעית הים (וידאו)



משחק תפקידים | "כשאני אומרת מה העבודה שלי, חושבים על ג'ורג' מסיינפלד": מה עושה ביולוגית ימית



החיים הסודיים של הכרישים: דני קושמרו במסע אל המצולות



כשהים טובע: הסכנות מעליית מפלס פני הים בחופי ישראל



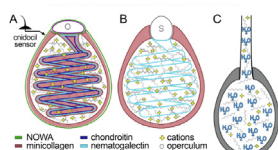
מחקר: שוניות האלמוגים ישרדו את השינוי בכמות החמצן כתוצאה משינויי האקלים



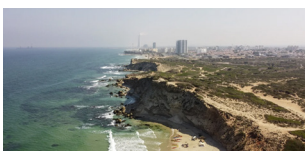
Experts find a previously unknown deep-water shark nursery near Israel's coast filled with hundreds of baby sharks and the largest concentration of shark eggs ever



What would you say to a whale?



Degenerate venoms and ultimate parasites



Earth has no climate problem. We're the ones who won't survive within decades





H. Nativ

*Have a great summer*  
מאתאים לכזבס חופש קיץ מנה