Dear colleagues,

It is a great pleasure to introduce this edition of the newsletter of the Israel Young Academy. The newsletter presents the work of our members and shares some of our recent activities.

The Israel Young Academy was established in 2012 as an incubator for ideas and initiatives to leverage Israel’s academic abilities. We reach out to policymakers, educators, senior academic administrators and the general public for the sake of turning our passions for creating and disseminating knowledge into action.

Our team includes 28 researchers in various fields of the humanities and the natural and social sciences from all of Israel’s universities. Members, up to age 45 in the year of their election, are elected to four-year terms, based on their academic excellence and outstanding initiatives.

This is an especially appropriate timeframe for our activities. As mid-career academics, we already enjoy security in our professions but are not yet saddled with major academic and administrative burdens. Our connection to the early stages of an academic career is still strong, giving us insight into the needs of students, recent postdocs and young faculty members. Many of us have children in the public school system, so it is a perfect time to initiate change on that front as well.

Our recent activities cover a wide range: displaying the achievements of Israeli science in the departures concourse of Ben-Gurion Airport, building new academic silk roads connecting high school pupils and universities, interacting with policymakers to advance scientific research, participating in joint workshops with members of other young academies, surveying the needs of young scholars entering the academic job market and hosting the Young Asian Academics Conference in Jerusalem. In all these, we aspire to make positive changes and, as academics, to participate in creating a better society.

We hope that you will find our activities relevant to the challenges you face as well. We would love to share our experiences and initiate dialogue with young academics around the globe. Please do not hesitate to contact us regarding any inquiries or initiatives you have.

I would like to take this opportunity to thank my partners in managing the Israel Young Academy: Prof. Elisheva Baumgarten and Prof. Michal Feldman; the Academy’s secretary, Ms. Merav Atar; and the creators of this newsletter, Ms. Sinai Harel and Prof. Nissim Otmazgin.

Prof. Ron Milo
Chair of the Israel Young Academy
In March 2017, the Young Academy held a conference entitled "The Humanities, Academia and Schools," in collaboration with the pedagogical secretariat of the Ministry of Education. Leading the conference were Young Academy members Prof. Jonathan Ben-Dov, Dr. Michal Bar-Asher Siegal, Prof. Eran Bouchbinder, Dr. Sharon Aronson-Lehavi and Prof. Elisheva Baumgarten.

Among the conference participants were policymakers from the Ministry of Education, the Council for Higher Education and local councils, as well as figures from inside the education system, including supervisors, school principals, teachers and academics. By bringing together individuals engaged in education at different levels and through various channels, the conference offered a unique opportunity for the participants to draw inspiration from one another's initiatives and ideas, and to enrich their understanding of the complex challenges faced by the humanities in Israel's education system.

Many speakers pointed to the deteriorating status of the humanities, trying to shed light on the sources of the problem and emphasizing its importance. "Promoting and cultivating the humanities is imperative in order to realize our full potential as human beings," said Rachela Schiffer of the Ministry of Education. The conviction that humanities subjects are more than just facts and knowledge, but also shape students' behavior, values and morals, was apparent throughout the conference. In this age of rapidly progressing technology and immediate satisfaction of every whim, many felt that a revitalization of
the humanities would provide students with much-needed critical thinking skills to go out into the world and be involved in it.

One of the conference’s aims was to establish connections between the various agents promoting the humanities within the system. Prof. Jonathan Ben-Dov addressed this issue in his opening remarks, in which he spoke of the importance of the connection between schools and academia, which already exists and has shown its value in the natural sciences, but not yet in the humanities. Prof. Yossi Shain of the Council of Higher Education’s Planning and Budgeting Committee also stressed the importance of creating continuity between the secondary and tertiary education systems as one way of halting the stagnation of the humanities in academia.

The conference included six sessions and presented 26 initiatives, each providing a different perspective on the state of the humanities in various environments and circumstances. Proponents of policy-oriented initiatives focused on promoting the humanities and regaining their lost prestige through structural reforms — for example, by creating new career paths for teacher-researchers or changing the requirements for a high school diploma. Others presented enrichment programs both inside and outside the schools, aimed at developing skills such as writing and critical reading of challenging materials, while creating a learning community. Another approach to enrichment was to introduce new subjects into the high school curriculum, such as Middle Eastern Studies and European and East Asian languages.

Further initiatives emphasized learning methods that promote the development of inquiry-based learning by using primary sources. Matriculation projects were also highlighted as offering potentially meaningful and positive experiences in the humanities for high school pupils. Various institutes and programs promote such projects by creating programs for outstanding pupils, training teachers and academics in mentoring, and holding award-winning competitions for research projects in the humanities. Lastly, programs for teacher training and development were presented.

Alongside these presentations, the conference’s participants and panels raised important issues for consideration. These included the need to address the crisis in the humanities not only at the high school level but also at the primary and middle schools levels; evaluation methods that may overlook or misjudge the humanities; local authorities as a significant resource in promoting various initiatives and projects; and the tendency to target the relatively small group of outstanding pupils while disregarding average and below-average pupils. The discussions also emphasized how academics could benefit from promoting the humanities in schools. Engaging in such activities provides them with opportunities not only to disseminate knowledge, but also to test their theories with curious and critical young minds in their home environment.

Many conference participants called for strengthening the humanities at various levels and through diverse means, and spoke of the need for cooperation between the Ministry of Education, local councils and the third sector. We hope that the conference created a foundation for future collaboration and inspired the participants to keep striving to promote the humanities.

Bringing the Humanities Back to the Academic Center
Tell me a little about yourself and your research. I am a mathematician. I received all my degrees from the Hebrew University and then did my postdoctoral research in the U.S. for five years, three at Ohio State University, one at the Institute for Advanced Studies in Princeton and one at the University of Michigan. I was a faculty member at the Technion (Israel Institute of Technology) for five years. I have been a professor at the Hebrew University since 2013. I was elected a member of the Young Academy two years ago.

My research is at the interface of several fields in mathematics, one of which is ergodic theory, which studies the long-term behavior of dynamical systems. Typically, a dynamical system is quite complex; even if you know the rules of its evolution over time, it is very difficult to know what happens to an individual element at a given time. An ergodic theorist would be interested not only in what happens to every point at any given time, but also in the development of the system as a whole – that is, in describing what happens to almost all the points over time.

For example, say you are making dough. You have your ingredients inside your bowl, and the process of mixing the dough is your evolving system. One such operation is called the baker’s transformation, in which you take the left side of the dough, put it on top and press down. Typically, an ergodic theorist would be interested in how well the ingredients mix over time. Another example involves a box with gas particles inside. In this case, the system would be the position and momentum of each particle at any given time. One starts out with an initial condition, in which each particle’s location and momentum at some given time is known. Although the rules of evolution governing the behavior of each individual particle are determined by physics, the large number of particles makes it impossible to determine the exact location and momentum of each particle at a given point in time. As an ergodic theorist, I would try to understand what happens after a given period of time if I start with a random initial condition. Ergodic theory would provide some interesting answers about the possible outcomes. For example, the famous Poincaré theorem implies that if you start with a box
with a barrier and all of the gas particles are on one side of the barrier, all of the particles will eventually return to that side after the barrier is lifted.

I am also interested in number theory. Specifically, I am interested in questions about various patterns to be found in prime numbers. Although prime numbers are a deterministic set – that is, each natural number is either prime or not prime – they have some random features. I am interested in exploring the connections between dynamical systems and number theory. I try to find patterns in primes using methods and ideas from dynamical systems.

Questions related to both these areas and the interface between them are things that I am working on now. As you make progress, there are always many new questions. You may take a small step forward, but then a whole new world of questions opens up. You go forward, trying to make your way, and then you hit a wall. You can stray sideways and you might find something interesting, or you might find nothing at all. By now, I have accumulated some big questions that I am interested in, and every time I make an advance, it usually brings up many more questions.

How does the work happen? What is your work process?
I sit with a big pile of papers, maybe a notepad. I fill it up and after a week I toss it in the trash, because most of it is junk. You have an image in your head of what you perceive to be true. You have some ideas about how to test it out. Usually it doesn’t work, and then maybe you change the picture in your mind about what is true. You hit many walls, and sometimes you can go for months without making any advance at all. Yet it isn’t really true that nothing happened; hitting a wall is in itself progress, because now you know that this direction isn’t the right one. Then at some point you find a crack, and you sort of push your finger through and try to widen it. Although it’s often frustrating, when it does work it’s fantastic. Then you are hyped up and can’t sleep, working until the next time you get stuck again. You have to be patient, very patient with yourself.

Do you work in teams?
It depends; you can work on your own and you can collaborate with other people. I’ve done both. Nowadays, more people collaborate than in the past because technology makes it much easier. It’s nice to work with people that have a different set of skills and intuitions than you. You might think that something works for a long time, whereas someone else might immediately tell you that it does not. It saves a lot of time when you can bounce your ideas off somebody else.

I am guessing that there aren’t many women in mathematics.
Actually, in our department in Jerusalem we have four women and have just hired a fifth, so that is exciting. But it’s a general problem. In other universities in Israel there are very few. Three years ago, Prof. Shiri Artstein of Tel Aviv University came up with the idea of a conference for Israeli women in mathematics. Since the second conference, we’ve organized it together. The first one was at Tel Aviv University, and last year it was at the Institute of Advanced Studies in Jerusalem. This September, we will have another one. It’s very nice. Women lecturers and women students take part. The participants need to have at least two years of math undergraduate studies. We are trying to create a network for the female mathematicians of Israel. So it’s important that the undergrads can see and talk to the graduate students, and the master’s students see and talk to the PhD students and so on. Postdocs and faculty members also come. I think of the participants in these conferences as the pipeline of women that we would like to have in academia in the future.
I received a lot of encouragement from my family when I was a PhD student and wanted to quit many times. I don’t think everybody gets that, so I want to do that for those women who might not receive this kind of support.

When you were a student, were there other women studying math with you?

I actually don’t think I was aware of it at all then. I never thought of it at all. You realize the loneliness of being a woman in mathematics as you go on. When you are a postdoc and suddenly you notice that there aren’t many other women around. And even more when you are a faculty member. One of my postdoc positions was at the University of Michigan, where they make an effort to hire more women postdocs. I came there and it felt so nice. At the beginning, I didn’t understand why it felt so good, but then I realized it was because there were many women around. Once, at a conference for women mathematicians in Europe, a colleague I met there told me: ‘You know what I like about conferences for women in math? I can leave the room without people noticing. I could not show up for a talk at the conference and it won’t be noticed.’ Because when you are the only woman or one of a few in the crowd, everybody knows where you are at all times.

As a student, I didn’t notice it, but now I think it’s out in the open. Female students are very self-conscious, which is great. They should realize that there are difficulties ahead. I hope many of them will try to make it through. I think it would be beneficial for everybody to have more women around.

Do you think women view math differently than men?

I don’t think they view it differently, but they sometimes react differently to career choices. Everybody gets stuck in their PhD. For women, there is a fallback; they can always go do some side job and decide to have a family and raise the kids. I was considering that. I was stuck in my PhD, and I think one of the problems is that as a woman, it’s more socially accepted if you quit. I wanted to quit many times. I had two kids during my PhD, and when I got stuck, I considered quitting and following my husband on his postdoc. I think my husband would never have considered that if it had been the other way around, because it is obvious for him that he has to pursue his career. Not only that, but it’s very difficult to go on a postdoc with a family. Many women break at that point, because you have to uproot your family, and your husband has to follow you. It’s socially accepted for women to follow their husbands, but not as acceptable for men to follow women.

In general, an academic career is difficult. You don’t know what will happen in the future; for a very long time you have no idea. Once everything is settled, it’s fantastic. But it’s indefinite for a very long time. It’s very risky in a sense. Women I talk to are not sure if they are good enough. They finish their PhD and get a postdoc, but they are not sure whether it’s worth uprooting the family without knowing whether they’ll later find a position in Israel. I think if women see more women faculty in Israel it will be easier to make this decision to go and come back. I hope that will happen. I hope these conferences will help. To be honest, it’s fun to have this kind of conference with lots of women who like math. It’s fun, but I hope it will also be helpful for some of them.

A while ago, I met this female mathematician. She was a PhD student in Princeton when I was a postdoc there. I didn’t know her then. She told me that just seeing me with three kids made her think it was possible. Now she is a mathematician, has two kids and is doing great. That was really nice to hear. I didn’t do anything; she just saw that it’s possible.
Projects and Initiatives

Science Exhibition at Ben-Gurion Airport

The Young Academy initiated a science exhibition at Ben-Gurion Airport, Israel’s principal international airport. The exhibition, brought to fruition with the cooperation of the Ministry of Science and Technology, the Ministry of Transport and the Government Press Office, opened in March 2016. On large-scale panels in the passenger terminal, it showcased inspiring research in the social sciences and the humanities, technological breakthroughs, research in the natural sciences and important discoveries in the life sciences.

The exhibition presented the best of Israeli science to some 15 million travelers – the average number passing annually through the airport. The exhibition also highlighted Jewish and Israel science giants such as Albert Einstein, Chaim Weizmann and Maimonides, Israelis who have received the Nobel Prize and other prestigious awards, and outstanding young researchers working at Israeli universities and research institutions. Images of Israeli scientists, both men and women, greeted the visitors and connected them to the human element behind scientific discoveries.

"Science Package"

We believe that making universities and research institutions accessible to the entire society can help strengthen weak population groups and preserve the level of research in academia, and that this is a social duty of the state. The Young Academy’s "Science Package" initiative would enable every secondary school student in the State of Israel, from all over the country, to visit a university or research institution at least once.

In the first stage of the proposed initiative, 20,000 ninth graders from the country’s periphery would enjoy an experiential day trip every year to one of the campuses around the country. The visit would directly expose the pupils to the nature of academic studies and research at these institutions, as well as to students and researchers. Young Academy representatives met with the Minister of Education, Naftali Bennett, to discuss and promote the initiative.
"First in Science" – Women in STEM Professions

Despite their considerable presence in many professions, the number of women in STEM (Science, Technology, Engineering and Mathematics) fields is notably low. The gender gap in these areas of study is already evident in primary school, widens in high school and continues in advanced academic degree programs. Many studies demonstrate that the reasons for women’s scant participation in these fields are mainly social and environmental. Social norms, social culture and the learning atmosphere in classrooms play substantial roles in creating and deepening this gap.

The “First in Science” initiative aims to connect women scientists and women studying for advanced degrees in STEM fields with schools around the country, where they can serve as role models. In talks to junior high school and high school classes, they talk about their research and their personal backgrounds, the difficulties they have encountered along the way and how they coped with them.

"Expedition Mundus" Game

The Young Academy translated a fascinating thinking game, originally developed by the Dutch Young Academy, for elementary school (grades 5–6), junior high school and high school students. The game simulates landing on another planet, where the players must answer questions typical of academic research in any field. Its objective is to demonstrate scientific research methods to youngsters by stimulating their curiosity in a fun and challenging way.

Currently the implementation committee is training moderators and promoting the game’s distribution to the country’s education system. The translation to Arabic is underway.
"Writing Centers in Israel"

With the aim of advancing and improving the writing and presentation skills of students and faculty members in both Hebrew and English, the Young Academy is endeavoring to establish a nationwide network of writing centers at all the country’s academic institutions. Members of the Young Academy’s Humanities Committee have mapped the writing centers already operating at some of the universities and colleges. The mapping has revealed the operation of diverse models of writing centers in some institutions and their absence in others.

A meeting held at the Academy’s premises brought together the heads of existing writing centers and representatives of institutions that have not yet established them. This led to the creation of two new writing centers, one at the Technion and the other at the Weizmann Institute of Science. Both are currently launching pilot programs.

The Young Academy aims to increase awareness of the importance of writing in general and of the significance of writing centers and the relationships between them in particular. It is hoped that strengthening these relationships will help each institution establish a center and advance its professional level. In due course, the Young Academy hopes to assist in expanding the national network of writing centers, establish a national forum on the topic and join with similar international organizations in this regard.

"The Young Academy's Spring Gathering"
An Interview with Dr. Michal Bar-Asher Siegal

by Sinai Harel

"it’s a little like being a detective, interpreting meanings, uncovering new pieces of the puzzle and later trying to fit them into the larger picture"

Tell me a little about yourself and your research.
I am a scholar of Talmud and rabbinic literature. I completed my BA and MA at the Department of Talmud at the Hebrew University and wrote my MA thesis on early legal midrash. I did my PhD at the Department of Religious Studies at Yale University. At Yale, I studied comparative religion and ancient Christianity. In my first book, I study the Christian background of the Babylonian Talmud and compare it to the Christian literature of the time and its monastic literature. It is a relatively new field of study, which makes it very exciting and intriguing. My research is part of a new scholarly trend. I argue that the connections between Rabbinic literature in its formative stages and Christian literature were much more extensive than we previously thought. The prevailing view was that Rabbinic literature developed independently, and contacts with Christianity were always polemical. As opposed to that, I suggest there was also literary dialogue and negotiation.

When did this take place?
The Babylonian Talmud was compiled around the 6th–7th centuries CE (though the sources adduced in the Talmud date back earlier than that). My research shows that even in later periods, the contacts between Jews and Christians were more extensive than we assumed. This topic relates to the larger question of the separation of Christianity and Judaism – when and how it came about. My findings reveal these interreligious connections and dialogues in the Babylonian Talmud, that is, in the formative texts of later rabbinic literature, texts that are still influential today.

After receiving my PhD from Yale, we returned to Israel, and then traveled again for my postdoc at Harvard University. Afterwards, I got a position at Ben-Gurion University in the Department of Jewish Thought, where we study and teach Jewish texts from various periods. The university is wonderful and our students are great.
And now?
I just finished another book, this one about the stories of heretics in the Talmud. Usually in these stories, we have "a heretic" coming to talk to a rabbinic figure. These heretics are called “minim,” and the question is what these stories reflect. It was once thought that all these heretics were supposed to be Christian. However, recent research contradicted this assumption. I am trying to go back and show that some of these heretics’ stories do in fact have a Christian background. My innovation is showing that the Talmud reflects a deep familiarity with inner Christian debates on the interpretation of the Bible, and not just knowledge but also coping strategies. It is very exciting because we are now at the forefront of this new field.

Everything you touch in this field is very new, and it's a lot of fun; it's a little like being a detective, interpreting meanings, uncovering new pieces of the puzzle and later trying to fit them into the larger picture. Eventually, I hope to gain a better understanding of the relations between the two religions, but we do not know what we will find in the end. Many times, we find new pieces that change what we thought about the entire picture. It really is very thrilling.

What do you do as a member of the Israeli Young Academy?
After a year at the Young Academy, I was surprised to realize how much the Academy’s undertakings appeal to me. I am involved in a few projects, which take some time and effort. That said, I am very happy and proud to be the representative of Ben-Gurion University. I am part of our Knesset committee, which means I go and sometimes contribute to discussions, as a representative of the Academy. I am especially interested in gender issues and the promotion of women in scholarship. I am part of the committee to promote the humanities and helped organize our recent conference on Humanities, Academia and Schools. Together with people from the Ministry of Education, we are trying to promote an initiative to change the Israeli high school matriculation (bagrut). We propose a combined humanities and sciences program, in which pupils can major in both science and humanities.

Today schools receive bonuses for teaching specific elective subjects, mainly natural and exact sciences, but also subjects in the humanities. The problem occurs when schools have to choose which elective subjects to teach: They choose the sciences every time. Giving bonuses for humanities subjects didn't change the situation at all. We – Prof. Jonathan Ben-Dov, Dr. Sefy Hendler and I – are trying to approach this issue from a different angle. We propose that incentives be given to schools that offer students majors in both humanities and sciences. In this way, students won't have to choose and can graduate from high school with knowledge and skills from both worlds.

As the representative of Ben-Gurion University at the Young Academy, I have the important job of implementing our various initiatives at the university. Together with Prof. Eran Bouchbinder, the head of the Writing Centers project, I am trying to promote a writing center at Ben-Gurion University.

Another project I am working on with Dr. Haim Weiss of Ben-Gurion University is creating a new career path for teacher-scholars. We are trying to solve two problems at once. On the one hand, many university graduates cannot find positions in academia; on the other hand, there is a shortage in schoolteachers. Many university graduates do not want to teach in schools because of the low pay and low status of the profession. In response to this situation, we are
trying to create a career path in which half your job is teaching at a school and half is at the university. This model already exists in physics in Jerusalem, and we want to duplicate it in the humanities in southern Israel.

My newest project concerns the Young Academy directly, as we are trying to improve the initiation process for new members. When we accept new members, it takes a long time for them to get involved in our activities, because we only have two gatherings a year. We only decided on this project at our last fall meeting, and we will start implementing it this spring.

What do you think of the Young Academy's operational model?
The Young Academy is still relatively new, so we get to forge our own path as we go forward. There is something beautiful about it. We simply take up issues that interest us and try to promote positive change. However, as our time and resources are limited, we mainly try to create connections and don't usually execute our own ideas. There are advantages and disadvantages to this method. We are very new to this kind of work, and although we have a lot of good intentions, sometimes we invest our time and energy in the wrong place. Other times we are preaching to the choir. This kind of involvement appeals to me very much. I am very interested in trying to influence things on a big scale like this. I learn a lot in the process, and that is the fun part. You always learn.

The Young Academy's purpose is to connect academia with the public. This is broad enough that each member can find his or her own interests and issues to promote. Although it isn't easy, I have a feeling that things are starting to move. We are learning how to work the system, and we also have the advantage of coming from the Academy. With its power and reputation, doors open more easily. We are energetic, not yet burned out, maybe a little naive and very passionate.

Do you think the creation of organizations such as the Young Academy may signify a change in the notion of "the scholar" – not only a researcher furthering knowledge, but also someone who is committed to promoting social change?
Yes. We just now finished the process of selecting new members. Of course, they are the top tier of young researchers, but the number one criterion was their motivation and ability to lead and initiate projects influencing the wider society. Another important criterion is teamwork. This is clearly the Young Academy's standard, and I think it will spread once other institutions see that it pays off to hire this kind of person, these Good Samaritans. I believe it's the right way to move forward. I have to say that everywhere I go as a representative of the Young Academy we get a lot of recognition for our work. I enter a room with university presidents and they know of us. I think that eventually it will affect the hiring of academic staff.

How do you find working with scholars from different disciplines?
Working together is one of the most beautiful aspects of our work in the Young Academy. It's not something I thought would happen, actually. We go to many meetings and we travel together in taxis in order to save money. We aren't paid, so the only monetary investments are those taxis that take us to the meetings. Sometimes the drive is the best thing. You can find yourself with someone from psychology or chemistry who is doing some amazing research, and it turns the hour riding in the taxi into a delight. It's also great to know that I am gaining friends for life. We pick only people who are nice to work with and are passionate about their work. It creates an amazing work environment.
In the course of 2015, the Israel Young Academy conducted a survey among scholars in Israel in order to understand their needs. The survey targeted academics who had begun working on a tenure track during the past ten years at one of the research universities in Israel or at the Weizmann Institute of Science.

Responding to the survey were 594 scholars, comprising about a third of all the young researchers who began to work during the last decade.

Young researchers in Israel are on average around 40 years of age, married and parents of two or three children. They have done their doctoral work in Israel and their post-doctorates abroad. Most are at the level of lecturer or senior lecturer (still without tenure).

Since the questionnaire included about 40 questions, and there were many options for adding free text, there were also many possibilities for analyzing the responses. The Young Academy chose to focus on attributes that were shared by the population of scholars, independent of the institutions where they worked.

The survey indicates that most of the scholars were satisfied with the time they spent abroad doing their post-doctorates, as well as with the process of returning to Israel. By contrast, in the process of preparing for a university position, it seems that there is room for improvement. The young researchers report a lack of information at the stage of submitting an application for a position and when starting out at work. The findings show that young researchers lack guidance for carrying out administrative roles and for coping with administrative systems and grant applications.

Furthermore, many noted that their teaching and administrative workloads during the initial years made it very difficult to conduct research. This stands out particularly in the humanities. Many of the
responses stress the lack of sufficient consideration for scholars who are parents of children of kindergarten and elementary school age, especially in setting the times for seminars and meetings.

In general, the scholars are satisfied with the options for receiving external research grants, and most report that the funds they have raised enable them to conduct research of interest to them. At the same time, many pointed to a significant lack of funds for traveling to scientific conventions abroad and for collaboration abroad.

Most of the young researchers are satisfied with the level of the students in Israel and their ability to recruit them for continuing MA and PhD studies. However, the difficulty in recruiting postdoctoral students is conspicuous and, needless to say, the lack of experienced graduate research students at the postdoctoral stage impairs the possibilities for conduct ambitious, long-term research projects.

A point of concern highlighted by the survey is that scholars in the humanities and social sciences reported lower levels of satisfaction than scholars in other fields. The survey’s conclusions indicate that young researchers in the humanities and social sciences are at a disadvantage vis-à-vis the universities and senior colleagues in almost all areas.

The Young Academy’s Humanities Committee recently formulated a plan of action for promoting various topics highlighted by the survey. In order to disseminate the questionnaire’s conclusions and discuss solutions, the Survey Committee issued a leaflet with the survey results and is meeting with the heads of all of the universities in Israel for a face-to-face conversation.
Meet the Israel Young Academy's Newest Members

Prof. Hisham Abu-Rayya,
University of Haifa

Hisham Abu-Rayya specializes in social-cultural psychology. He completed his BA in psychology and statistics at The Hebrew University of Jerusalem and received his PhD from Cambridge University, UK, in 2005. Prior to joining the University of Haifa, he worked at the School of Psychology, the University of Sydney, and the School of Psychology and Public Health, La Trobe University, Melbourne, Australia. Abu-Rayya's primary teaching and research position is at the University of Haifa, and he also holds an adjunct professorship at La Trobe University.

Abu-Rayya's primary research interests are cross-cultural transitions/acculturation and adjustment; inter-group relations and prejudice reduction; mixed ethnic/cultural/faith marriages, identity and adjustment; culture, psychological development and mental health; psychology of religion/religiosity, personality and mental health; and cognitive and behavioral functioning in children.
Meet the Israel Young Academy’s Newest Members

Prof. Michal Sharon,
Weizmann Institute of Science

Michal Sharon received her BSc in Chemistry from The Hebrew University of Jerusalem. Her PhD studies at the Weizmann Institute of Science focused on studying the three-dimensional structure of proteins by nuclear magnetic resonance (NMR). She conducted postdoctoral research in the Department of Chemistry at the University of Cambridge until 2007, when she joined the faculty of the Weizmann Institute of Science.

Research in Sharon’s lab focuses on unraveling the regulatory mechanisms that coordinate the function of large protein complexes. Specifically, the group aims to discover the mechanisms that control the activities of molecular machines involved in the protein degradation pathway. To do so, the Sharon group applies and develops novel native mass spectrometry approaches, in conjunction with fluorescence microscopy and biochemical and cell biology methods, generating an integrative mode of analysis that combines in vitro and in vivo findings.

Prof. Amit Bernstein,
University of Haifa

Amit Bernstein received his BA with honors in psychology from the University of Wisconsin-Madison and his PhD in clinical psychology from the University of Vermont. He did his post-doctorate at Stanford University School of Medicine and the Center for Health Care Evaluation. He joined the Department of Psychology at the University of Haifa in 2008, where he is currently an associate professor.

Bernstein's work has focused on how mental health is shaped by the ways in which people experience and respond to their own internal states (e.g., thought, emotion, physical sensation). More specifically, he strives to understand, measure and therapeutically target the psychological processes that engender and maintain prevalent forms of mental suffering, such as anxiety and depression.
Meet the Israel Young Academy’s Newest Members

Prof. Tamar Geiger,
Tel Aviv University

Tamar Geiger studied biology at The Hebrew University of Jerusalem, where she also completed her MA and PhD in biochemistry. In 2008, she moved to the Max Planck Institute of Biochemistry, Martinsried, Germany, to specialize in proteomics technology and apply it to cancer research. In 2011, Tamar moved back to Israel and opened her own research laboratory at Tel Aviv University. Since 2016, she is an associate professor in the Faculty of Medicine.

Geiger’s research focuses on cancer proteomics. She uses state-of-the-art mass spectrometry-based proteomics technology to study cancer progression and drug resistance mechanisms. She focuses on clinical research of breast cancer, melanoma, ovarian cancer and pancreatic cancer, analyzing clinical tumor samples and body fluids. Ultimately, her research aims toward cancer biomarker discovery and providing better understanding of cancer transformation processes.

Dr. Natasha Gordinsky,
University of Haifa

Natasha Gordinsky is a comparative literature scholar with a PhD in Hebrew Literature from The Hebrew University of Jerusalem. She conducted postdoctoral work at the Simon Dubnow Institute at Leipzig University on a Minerva Fellowship (Max-Planck Society). She currently teaches in the Department of Hebrew and Comparative Literature at the University of Haifa. With Dr. Lior Levy, she established the first BA program in Israel for Philosophy and Literature, funded by Yad Hanadiv.

Gordinsky’s research interests include Hebrew literature, German literature, Russian literature, history and literature, modernism, migration studies and memory studies. She is currently working on two research projects: exploring the literary representations of historical narratives and spatio-temporal configurations in contemporary post-Soviet authors writing in Germany. The second, part of an international collaboration entitled “In Their Surroundings: Localizing Jewish Modern Literatures in Eastern Europe,” seeks to incorporate local and spatial perspectives into the study of Hebrew and Yiddish literature in Eastern Europe, enabling the study of the latter as regional phenomena.
Meet the Israel Young Academy’s Newest Members

Prof. Tomer Volansky,
Tel Aviv University

Tomer Volansky completed his BA in Physics and Mathematics at the Hebrew University of Jerusalem in 2000. He studied physics at the Weizmann Institute of Science, where he also completed his PhD. He was a postdoctoral fellow at Princeton and UC Berkeley and returned to Israel in 2011. He currently holds a position at Tel Aviv University.

Volansky is a theorist working in high-energy physics. Among his interests: physics beyond the standard model, LHC phenomenology, dark matter physics, cosmo- and astro-particle physics, Higgs-boson physics, supersymmetry and extra-dimensions.

Dr. Keren Weinshall,
The Hebrew University of Jerusalem

Keren Weinshall holds an LLB in Law and a BA in Political Science from Tel Aviv University, and an MA and PhD in Political Science from the Hebrew University. She was a Visiting Researcher at Harvard Law School and taught as a Visiting Professor at the Max Planck Institute in Germany. Currently, she is an Associate Professor at the Hebrew University's Faculty of Law and holds the Guth-Dreyfus Chair in Conflict Resolution and Law.

Weinshall specializes in empirical research on socio-legal institutions. Her research is interdisciplinary in nature and focuses on the relationship between politics and law, with an emphasis on judicial decision-making. In her recently published book, she offers quantitative and qualitative analyses of the considerations guiding Supreme Court justices in Israel when making judicial decisions, and compares the patterns of decision-making in Israel to those of the Supreme Courts in the U.S. and Canada.
Prof. Eran Yahav,
Technion – Israel Institute of Technology

Eran Yahav completed his BA studies in the Department of Computer Science at the Technion, where he is now a faculty member. He received his PhD in Computer Science from Tel Aviv University.

His research interests include program synthesis, machine learning and information-retrieval techniques for PL, program analysis, abstract interpretation, verification and programming languages, and software engineering.

Research in Eran's lab focuses on learning from "big code", the attempt to learn from existing code bases to facilitate the validation and creation of new software. Specifically, Eran's group develops techniques that combine machine learning and program analysis to address challenges in practical synthesis.

Prof. Liat Kozma,
The Hebrew University of Jerusalem

Dr. Liat Kozma completed her PhD in the joint program in History and Middle Eastern Studies at New York University. She is currently a senior lecturer in the Department of Islamic and Middle East Studies and Director of the Nehemia Levtzion Center for Islamic Studies at the Hebrew University.

Kozma's numerous publications have examined Moroccan feminism, sexology in translation in the modern Middle East, the history of drug traffic in Egypt and beyond, and the history of medical research in the region. Her books include Policing Egyptian Women: Sex, Law and Medicine in Egypt 1850–1882; Global Women, Colonial Ports: Regulated Prostitution in the Interwar Middle East, and, in Hebrew, Women Writing History: Feminism and Social Change in Morocco.
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