Newsletter – The School of Public Health University of Haifa

A Message from the Head of the School of Public Health – Prof. Orna Baron-Epel

Our school is continuing to develop and grow. This year Prof. Kerem Shuval joined our faculty after 12 years of research and teaching in the USA. Prof Shuval received his PhD at our school with Prof Shai Linn, before going to the US to do his Post Doc studies at Yale University. You are invited to read about his research area in this newsletter. In addition, we are recruiting another new faculty member next year. This year four new lecturers started to teach at the school, some of them are teaching new courses added to the program. Today, in our various programs we have about 40 compulsory courses for the entire school and for the different programs, and 40 elective courses. This is a large selection of courses compared to other programs and enables the student to be exposed to a large variety of subjects and teachers.

Another development at the school is the plan to open a biostatistics program. We are now working to develop the program and the syllabi for the courses and get the university's approval. The program is intended to draw students that are interested in developing their knowledge and skills in biostatistics, data sciences and clinical trials, with an emphasis on understanding and implementing traditional biostatistics methods and more up-to-date methods and developing acquiring skills to understand and develop methods in public health and medical research. As biostatistics is a multi-disciplinary subject, students will be able to come from a large range of backgrounds, such as doctors, other health profession, students with a computing background

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and others, of course they need to have computing skills to enable them to cope with the mathematical courses. Students with a strong background in research methods will be able to join after taking background courses in public health. The objectives of the program are to provide students with knowledge in biostatistics, data sciences and clinical trials so students are prepared to work in industry and research organizations. Students will obtain skills and understanding of biostatistics, big data and clinical trials to further research in public health by collaborating with other researchers in other scientific areas. Many organizations are interested in employing biostatisticians with a background in public health and epidemiology.

This year 170 students started their graduate studies at our school, an increase of 50% within 4 years. The increase in the number of students is evident in all programs and therefore we are in need of an increase in resources and adaptations of the study program to the increased number of students. One method we are trying to develop is teaching through on-line courses, where students are not obligated to come to class and can which make it possible to give all the frontal courses needed to graduate by studying one day a week. During the one day a week teaching basis, students are exposed to a wider range of classes and subjects. We also encourage Hebrew speaking students to take our English speaking classes that are offered to the international students.

This year five students finished their PhD at our school and today there are 30 students registered in the PhD program.

During the year we continued the development of our international collaborations. In May, three of our

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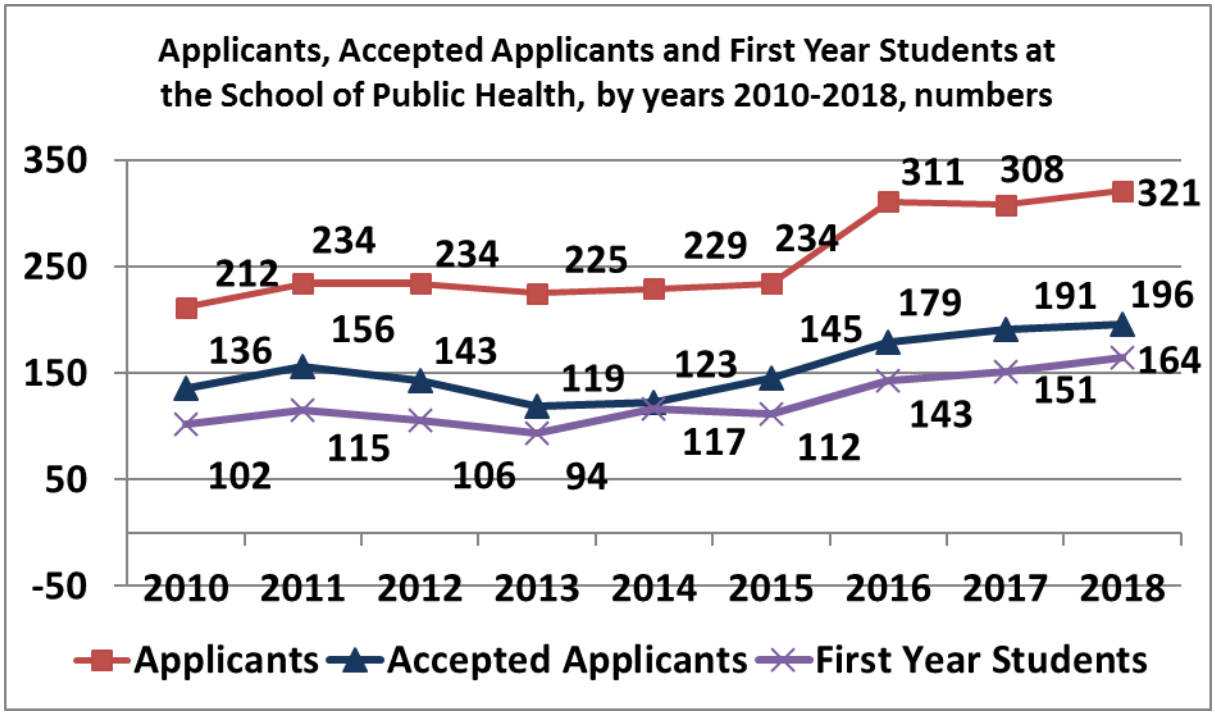
faculty traveled to Zagreb and gave lectures at the University of Zagreb, school of public health, and this year a student will be going there for a semester of studies funded by the Erasmus EU program.

In addition, we are developing a collaboration with the University of Connecticut. Two professors ran a workshop on implementing public health interventions last winter and after a visit by Prof Dan Weiner the vice president for global affairs and Prof Jeff Fisher of the Institute for Collaboration on Health we are planning research collaborations and joint grant applications.

We wish all of us a healthy and fruitful academic year!

Prof. Orna Baron-Epel, Prof. Shira Zelber-Sagi and Dr. Yaakov Rosenfeld at the University of Zagreb, May 2018

Prof. Diane Levine receives an award for an outstanding lecture at the Conference on Health Promoting Hospitals and Health Services, Bologna, Italy - June 2018



Nutritional Therapy Guidelines of NAFLD – Prof. Shira Zelber-Sagi

On January 2018 the Israeli Nutritional therapy guidelines of Non- alcoholic Fatty Liver Disease were first published. I led the writing on behalf of the Israeli nutritionists association- ATID. Sincere gratitude to Carmit Netanel my associate for writing these recommendations with me and for the gastro forum members of the ATID association.

Non-alcoholic Fatty Liver Disease (NAFLD) was recognized in previous years as a major health problem due to its high prevalence and the risk of progression to liver cirrhosis, liver cancer and also, increased cardiovascular and solid neoplasm risk. NAFLD is known today as the most common liver disease (1), with a prevalence rate among adults of 20-30% in most studies (2), and lately a prevalence of up to 46% was reported in the USA (3). NAFLD prevalence among obese patients reaches up to 70-80% and up to 50-74% among diabetic patients (2, 3). Until recently, NAFLD was considered a benign finding. Now it is clear that 10-20% of NAFLD patients are at risk for the more advanced form of the disease called Non-Alcoholic Steato-Hepatitis (NASH), and 3-5% of them are at risk for cirrhosis and primary hepatocellular carcinoma (HCC) (4-7). Additionally, fatty liver is considered the liver component of the metabolic syndrome and as an early risk factor for type-2 diabetes and cardiovascular disease. A meta-analysis found that NAFLD doubles the risk for cardiovascular disease (95% CI 1.8-2.3) (8). Likewisee, NAFLD increases the risk for type-2 diabetes by 3.5 fold (95% CI 2.3-5.4) independently in other known risk factors (8).

NAFLD is a multifactorial disease for which the causes are partially known. Among the most important risk factors are insulin resistance and elevated abdominal fat. There is a wide consensus that behavioural factors are involved in the pathophysiology of NAFLD while the most important aspects are excessive energy consumption, inadequate nutritional composition and sedentary lifestyle.

The main part of the treatment focuses on treating and preventing risk factor of the disease, which include: obesity, insulin resistance, hyper-triglyceridemia, diabetes and impaired fasting glucose (IFG) levels, as well as treating risk factors for cardiovascular disease like high cholesterol levels. So far, no NAFLD-specific pharmacological treatment was established and routinely adopted. Weight loss and physical

activity have consistently been demonstrated to be effective across different studies, and therefore are adopted as first line treatment for NAFLD.

There is a wide consensus that moderate weight loss of 0.5-1 kg per week can improve and even completely regresses liver fat and also regresses NASH and fibrosis. Furthermore, losing weight leads to an improvement in serum liver enzymes, up to normalization. Weight loss is recommended with structured diet, either low fat or low carb tailored to the patient's preferences.

In Clinical Practice Guidelines that were published by the European Association for the Study of the Liver (EASL) (9), weight loss of 7% was recommended as a treatment for NAFLD and NASH, as was recommended by other international associations for health benefit (10).

In clinical practice guidelines of NAFLD published by the American Association for the Study of Liver Diseases (AASLD) there was a special emphasis on healthy lifestyle, summarizing that weight loss alone or combined with exercise can lower liver fat, when 3-5% of weight loss is required. Nonetheless, a greater weight loss of 10% is required for improvement of NASH (11).

Based on the knowledge that was collected from animal and human studies, it appears that dietary composition similar to the Mediterranean diet pattern can reduce liver fat even without accompanying weight loss. In light of the clear advantages of the Mediterranean diet on liver fat reduction, weight loss and reducing risk for diabetes and cardiovascular disease, the European Association for the Study of the Liver recommends the Mediterranean diet as one of the ways to treat NAFLD (9). Specifically, NAFLD patients should limit the consumption of fructose or high fructose corn syrup. Therefore, they should limit consumption of sugar sweetened beverages, fruit juice even if natural and high sucrose food (disaccharide composed of glucose and fructose). Numerous of epidemiologic studies demonstrated an association between sugar sweetened beverages and NAFLD (12-16).

In summary, nutrition was clearly demonstrated to have a strong association with NAFLD and NASH, in lab animals and humans. Therefore, nutrition plays a crucial part in treatment. Clinical trials from recent years clarified the benefits of moderate diet and exercise as a therapy for fatty liver. Most studies indicatee an improvement in liver fat and serum liver enzymes with weight loss of about 5%. Fatty liver patients with normal or over-weight must understand the importance of their nutrition composition and the reduction of saturated and trans fatty acids, reduction of added sugars and avoidance of sweetened beverages containing sugar or fructose, including fruit juice. Physical activity is helpful even if moderate, rregardless of weight reduction, and a small increment may lead for significant clinical improvement.

Elements of a comprehensive lifestyle approach to NAFLD treatment (obtained partially from the NAFLD Clinical Practice Guidelines of the European Association for the Study of the Liver 2016) (9).

Component	Suggested intervention	Supportive literature
Energy restriction and weight loss	500-1000 kcal energy deficit, to induce a weight loss of 500-1000 g/week.	Calorie restriction drives weight loss and the reduction of liver fat, independent of the macronutrient composition of the diet.
	7-10% total weight loss target.	A 12-month intensive lifestyle intervention with an average 7% weight loss leads to significant reduction of hepatic steatosis.
	Long-term maintenance approach, combining physical activity according to the principles of cognitive-behavioural therapy.	
Diet composition-Macronutrient composition	Diet composition can be varied and according to patient's preferences, so he could keep the diet for long-term. Patients may try Mediterranean diet/ Low-carbohydrate diet / Low fat diet.	Adherence to the Mediterranean diet has been reported to reduce liver fat on 1 H-MRS, when compared with a low fat/ high carbohydrate diet in a cross-over comparison. But low fat diet by itself also reduces liver fat.
Fructose intake	Avoid sweetened beverages which contain sucrose (disaccharide composed of glucose and fructose) and fructose and reduce as much as possible foods containing added sugars.	In the general population, an association has been reported between high fructose intake and NAFLD.

Alcohol intake	Strictly keep alcohol below the risk threshold (30 g, men; 20 g, women).	In epidemiological surveys, moderate alcohol intake (namely, wine) below the risk threshold is associated with lower prevalence of NAFLD, NASH and even lower fibrosis at histology [112-114]. Total abstinence is mandatory in NASH-cirrhosis to reduce HCC (liver carcinoma) risk.
Coffee drinking	No liver-related limitations, but also too soon to recommend.	Protective in NAFLD, as in liver disease of other aetiologies, reducing histological severity and liver-related outcomes.

Exercise/physical activity	150-200 min/week of moderate intensity aerobic physical activities in 3-5 sessions are generally preferred (e.g. brisk walking, cycling).	Physical activity follows a dose-effect relationship and vigorous (running) rather than moderate exercise (brisk walking) carries the full benefit, including for NASH and fibrosis. Any engagement in physical activity or increase over previous levels is however better than continuing inactivity.
	Resistance training is also effective and promotes musculoskeletal fitness and attenuates metabolic risk factors.	

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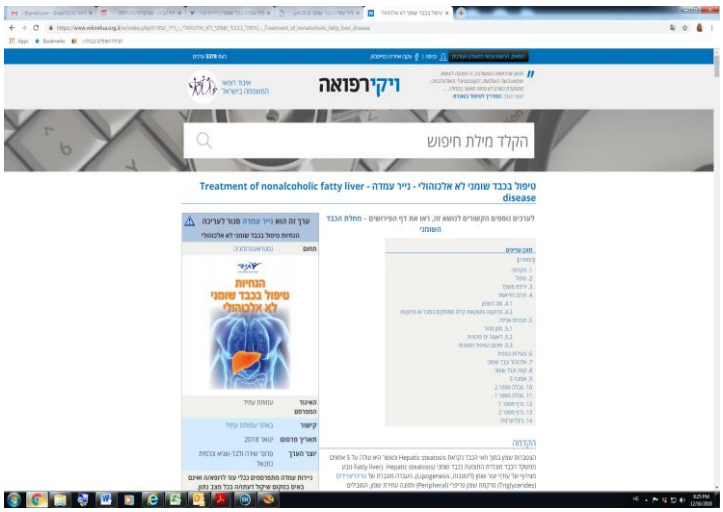

How to Combine Cancer, Prevention, Chronic Morbidity and Holocaust Survivors? – Prof. Lital Keinan Boker

I am a physician and a public health specialist with a Ph.D. in epidemiology. My main interest lies in the field of cancer epidemiology. Specifically, I am very interested in all prevention levels associated with cancer: primary, secondary and tertiary.

With respect to **primary prevention**, my doctoral thesis dealt with phytoestrogen intake on breast cancer incidence. Results were controversial. Other etiologic studies I carried out on this field include assessing the association between breastfeeding and childhood leukemia and lymphoma (PhD thesis of Efrat Amitay); studying the relationship between exposure to passive smoking and breast cancer in Arab women (PhD thesis of Zippi Avraham); studying risk factors of cervical cancer in Israel (PhD thesis of Ravit Bassal); estimating the association between adolescent measured BMI and mid-life cancers of the breast in both men and women (using the large Malshav cohort over a million participants - of candidates for the compulsory military service in Israel, 1967-2010); and others.

Addressing **secondary prevention**, I am interested in the treatment adherence of cancer patients: a PhD student of mine (Orit Castel Cohen) is studying factors predicting adherence to oral cancer treatment; another student (Ilanit Shalom-Sharabi) has just completed a large study on the impact of complementary medical treatment on the adherence to conventional therapy in active cancer patients. Likewise, I am also interested in the early detection of cancer, but most of my activity in this area is regulatory, within my capacity as the Deputy Director in the Israel Center for Disease Control, and the person in charge of the Israel National Cancer registry and of the Israel Screening Program for Breast Cancer.

Regarding **tertiary prevention**, I am interested in outcomes of cancer survivors, taking into account the effect that the conventional treatment against the primary tumor may have, in the long run, on their physical health. Thus, I investigated the chances of having a second primary tumor in cancer survivors, first in children (MPH thesis of Samah Hayek) and

then in Israeli breast cancer survivors (with Dr. Barbara Silverman). In addition, a PhD student of mine, Dr. Elena Itzhakov, studied the chronic morbidity associated with thyroid cancer care in adults in Israel. The rather young age at thyroid cancer diagnosis and the very high rates of survival of the patients allow for a long follow up and a higher probability of long term effects. Another PhD student of mine (Rola Hamood) is studying the long-term health outcomes of breast cancer patients in Israel, in an attempt to create guidelines for an appropriate follow up for these survivors.

Another main research interest of mine is the physical late effects of the Holocaust on the survivors (first generation) and their offspring (second generation). The MPH thesis of Neomi Vin-Raviv, supervised by Prof. Micha Barchana and Prof. Shai Linn, to whom I later joined, focused on cancer incidence in Jewish WWII survivors, compared to Europe-born Jews not exposed to WWII in Europe. The findings indicated that those exposed to WWII were at a higher risk for cancer compared to their counterparts, and that the lower the age at exposure, the higher the risk. Since the exposure in this study was determined by a proxy variable (place of birth and immigration date) and thus was ecological by nature, we have conducted a case-control study (PhD thesis of Dr. Vin-Raviv) to further explore the impact of hunger exposure and Holocaust-related post-traumatic stress disorder on breast cancer risk. The results confirmed our hypotheses that a higher exposure to hunger during WWII, especially at a younger age, was associated with higher risk for breast cancer later on in life. WWII post-traumatic stress disorder (PTSD) synergistically modified this association.

I have collaborated with Prof. Shaul M. Shasha and a medicine student (Eyal Berkovich) on a pilot study regarding the long-term health outcomes in Holocaust child survivors who were born during the War years. The results showed that subjects born during WWII in Europe or shortly after have a higher prevalence of many chronic risk factors (such as dyslipidemia) and conditions (such as chronic ischemic heart disease). We have conducted another study, using the Clalit HMO-North District database, to further explore the same study question, this time using medical records instead of self-reports to confirm morbidity. The results of this study were largely identical to those of the pilot study. Currently I am planning a large study on offspring of Holocaust child survivors (born during WWII years), in collaboration with Maccabi Health Services. In this study we will estimate the risk for several chronic outcomes in the offspring, will further collect information on potential risk factors, behavioral and metabolic, and hopefully, resource-depending, also study the epigenetic background of the participants.

The Nexus of Behavioral Economics & Public Health – Prof. Kerem Shuval

My research examines ways to modify lifestyle behaviors, primarily physical activity, sedentary behavior, and dietary intake as they relate to obesity and chronic disease prevention. This research often takes an interdisciplinary approach, drawing from the fields of epidemiology, behavioral economics, and psychology, to better understand decision making processes that lead to improved health and welfare.

Recently, I have been drawn to the nexus of self-control and health behaviors. Insufficient self-control reflects a preference for the here and now to myopically satisfy wants. For instance, I really *want* to eat chocolate cake this minute though I know I *should* reach for an apple which yields downstream health benefits.[1,2] Individuals able to delay gratification are regarded as having patient time preferences. [3]

"Traditional" economics assumes that these preferences remain constant over time, whereas behavioral economics acknowledges that these preferences are likely to change, particularly in a "hot" state.[4] For example, I promise myself not to touch pizza that will be served at my friend's party tomorrow, only to find myself eating half a pizza pie because of the aroma wafting through the room. Similarly, I promise myself to wake up early at 5:00am to run a 10K before work, only to hit the snooze button the next morning.

Economists often measure these "intertemporal time preferences" experimentally via choice tasks (e.g., multiple price list) focusing on eliciting preferences for a smaller reward now versus a larger reward later on. For example, do you prefer X dollars today or opt for Y dollars in one month.[5] Through responses to these questions, economists are able infer individuals consistent and inconsistent time preferences (indicative of self-control problems) and then examine its relationship to various outcomes.

My colleagues and I have been interested in the relationship between time preferences and various health behaviors and outcomes. In a series of studies, we have found that impatient time preferences are related to not meeting physical activity guidelines, to eating less fruit and vegetables, and markedly more fast foods.[6–8] More importantly (and worrying), is that parents' time preferences appear to be related not only to

their own obesity, but to that of their children.[4] That is, parents with impatient (or inconsistent) time preferences have a higher likelihood of having children who are obese too.

These relationships were observed among national population based samples and low income residents alike.[9,10] While time preferences might not always be malleable, behavioral economics offer strategies, such as pre-commitment contracts or temptation bundling, to deal with these inherent preferences to improve one's health and welfare.[2,3,11,12] In sum, the intersection of Behavioral Economics & Public Health is timely and important and is becoming pervasive in preventive medicine research.

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Effects of Mindfulness Training on Self-Monitoring Adherence and Cognitive-Behavioral Treatment Outcomes among Women Suffering from Binge Eating Disorders: A Clinical Trial

- Rinat Grundman - Shem Tov

Background: Bulimia Nervosa (BN) and Binge Eating Disorder (BED) are Binge Eating Disorders (BE-Dis) in which binge eating episodes are the main symptoms. Cognitive Behavioral Therapy (CBT) has been considered as a leading evidence-based treatment for patients suffering from these disorders, while CBT-E is a new "enhanced" version of this treatment. A key tenet of CBT-E is the use of self-monitoring in which patients are required to record their eating, the circumstances, and their thoughts and feelings proximate to the time of eating. Nevertheless, despite the importance of this tool, there are many challenges for clients' adherence to self-monitoring. Additionally, in recent years there has been cumulative data in the eating disorders field supporting the use of Mindfulness approach, which is defined as the awareness that arises from purposeful and non-judgmental attention given to the present moment. However, although self-monitoring requires the ability to observe, describe and identify occurrences, no studies have yet examined the direct effect of mindfulness training on self-monitoring adherence, and therefore on improvement of treatment outcomes.

Objectives: The present study examined the effects of mindfulness training during a group CBT-E intervention for BE-Dis on adherence to self-monitoring, eating disorders and comorbid symptoms.

Method: This study was a randomized, controlled, parallel clinical trial. Participants were 48 women between the ages of 18-55 who met DSM-5 criteria for BN or BED: 24 participants in the experimental group (mindfulness skills training in preparation and during the CBT-E program) and 24 participants in the control group (CBT-E program, with no mindfulness content or training). Both groups comprised of 90-minute, 24 sessions. Treatment outcomes were assessed after 3 and 6 months

from end of treatment. Self-monitoring was recorded electronically on the participants' smartphones.

Results: This study found that group CBT-E, with and without mindfulness components, reduces target symptoms in patients with BE-Dis. Additionally, based on a unique first database of 20,000 self-monitoring reports, no significant group differences were found in self-monitoring adherence, except for the **extent of use of the "thoughts and feelings" column which was higher in the experimental group.** Finally, moderator analysis found that under conditions defined as relatively "less acute" (characterized by lower levels of anxiety and stress, longer disease duration, and higher BMI), increased use of the "thoughts and feelings" column was shown to improve treatment results compared with the control treatment. On the other hand, under conditions defined as relatively "more acute" (characterized by higher levels of anxiety and stress, shorter disease duration, and lower BMI), increased use of "thoughts and feelings" column was shown to relate to less favorable treatment outcomes compared with the control treatment.

Discussion: The increased use of the "thoughts and feelings" column in the experimental group compared with the control group indicates **added value and unique contribution of the mindfulness components** added to the CBT-E protocol. However, given the different efficacy– adding mindfulness components **in its current format should not be universally prescribed**. This finding is consistent with a growing understanding that not everyone with BE-Dis needs the same type and intensity of treatment.

The Association between Urinary Community-Acquired Fluoroquinolone-Resistant Escherichia Coli and Neighborhood Antibiotic Consumption: A Population-Based Case-Control Study – Marcelo Low

Background

Many studies have shown a correlation between the widespread use of antibiotics and the development of resistant bacterial strains, but these studies also point to the need for further understanding of pathways of resistance development and spread among populations associated with developing resistance and the spread of resistant bacterial strains at hospitals and in the community. Antibiotic treatment was identified in many studies as a major risk factor for the development of resistant bacteria that cause urinary tract infection. Furthermore, it was clear that the bacteria transmission and proliferation has both individual and environmental determinants.

Methods

A nationwide retrospective cohort study of 2.4 million adult Clalit Health services (CHS)members, living in 1,733 geographically delineated statistical areas was performed. We employed a hierarchical, multilevel logistic regression approach to evaluate the association between neighborhood fluoroquinolone consumption and the individual risk of being colonized or infected with fluoroquinolone-resistant *Escherichia coli* (*E. coli*). A specific epidemiological framework (Case-Case-Control/Case-Control-Control) which basically is three case-control studies was used to assess the intrinsic bias when searching for the association between resistant bacterial growth prior to exposure to antibiotics.

Results

In this very large study, a statistically significant dose-response relationship between residence in a neighborhood with higher fluoroquinolone consumption and an increased risk of bacteriuria caused by fluoroquinolone -resistant *E. coli* was found. The odds ratios found for the isolation of Fluoroquinolone Resistant *E. coli* among females by quintiles of neighborhood fluoroquinolone consumption, when compared with the lowest consumption quintile were 1·15 (95%CI 1·06–1·24), 1·31 (1·20–1·43), 1·41 (1·29–1·54), and 1·51 (1·38–1·65). ORs for males were similar, with a dose-response relationship among females and males. These odds ratios, while small for the

individual, suggest a substantial contribution of community fluoroquinolone consumption to the overall spread of antimicrobial resistance at the population level. According to the multilevel study, the population fraction of urinary fluoroquinolone resistant *E. coli* attributed to personal fluoroquinolone consumption among females is 46%, while the neighborhood fluoroquinolone consumption above 0.87 DDD/1,000 persons per day accounted for 25% of the cases.

Conclusion

These data, which support transmission through close contact, could explain how an increase in neighborhood antibiotic-consumption rate might lead not only to the appearance of resistant bacteria but also to the transmission of such bacteria to people who have never used antibiotics. This study is the first such study to demonstrate this important finding and was accepted for publication in Lancet Infectious Diseases.

This provides additional evidence supporting the hypothesis that surrounding human use of antibiotic increases the risk of acquiring resistant bacteria for persons who are not directly involved. The association shown should serve as yet another driving force in the effort to avoid unnecessary antibiotic use

Prof. Orna Baron-Epel

Publications:

Amit-Aharon**,** A., Nehama, H., Rishpon**,** S., & **Baron-Epel, O.** (2018). A path analysis model suggesting the association between health locus of control and compliance with childhood vaccinations. *Human Vaccines & Immunotherapeutics, 14,* 9.

Baron-Epel, **O.**, Bord, S., Cohen-Dar, M., & Obeid, S. (2018). A cross sectional survey assessing knowledge, attitudes and behaviors regarding brucellosis among Arab Israelis. *BMC Public Health, 18,* 516.

Haimi, M., Brammli-Greenberg, S., Waisman, Y., **Baron-Epel, O.** (2018). Physicians' experiences, attitudes and challenges in a Pediatric Telemedicine Service. *Pediatric Research.* doi:10.1038/s41390-018-0117-6.

Regev-Avraham, Z., **Baron-Epel O**, Hammond, S.K., & Keinan-Boker, L. (2018). Passive smoking, NAT2 polymorphism and breast cancer risk in Israeli Arab women - a case-control study. *Breast Cancer***,** *25 (2),* 176-184.

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Recent Grants:

Baron-Epel, O., & Key, C. Characterization of the factors that influence using online services and their impact on the control of diabetes. Funded by The National Institute for Health Policy Research.

Baron-Epel, O., Obid, S., Bord, S., & Kabaya, D. Development of interventions to prevent brucellosis via community participations. Funded by Ministry of Agriculture.

Baron-Epel, O., & Tesker, R. Participation in a net ball league increases social capital and promotes health and wellbeing- MamaNet. Funded by MOST.

Baron-Epel, O., Tor Sinai, A., et. Attitudes and Changes in Lifestyle, Nutrition, and Physical Activity Patterns among Adolescents: The Role of Social, Economic, Family, and Peer Factors. Funded by MOST.

Prof. Rafael Carel

Publications:

Marom, B., Razon, N., **Carel, R.S.**, & Sarabi, M. (2018). Return to work barriers among manual workers after hand injury: one year follow up cohort study. *Arch. Physical Med Rehab, 99*, 1-11.

Menya, D., Oduor, M., Kigen, N., Maina, S., Some, F., Kibosia, C., Chumba, D., Murgor, F., **Carel, R.S.**, Middleton, D., Abedi-Ardekani, B., Schuz, J., & McCormack, V. (2018). Cancer epidemiology fieldwork in a resource-limited setting: experience from the ESCCAPE esophageal cancer case-control study in western Kenya. *Cancer Epidemiology*, doi: 10.1016/j.canep.

Yagil, D., Eshed-Lavi, N, **Carel, R.S.**, & Cohen, M. (2018). Health care professionals' perspective on return to work in cancer survivors. *Psycho-Oncology, 27(4)*, 1206-1212. https://doi.org/10.1002/pon.4649

Yagil, D., Eshed-Lavi, N., **Carel, R.S.**, & Cohen, M. (2018). Return to work of cancer survivors: Predicting healthcare professionals' assumed role responsibility. *J Occup Rehabil*, doi: 10.1007/s10926-018-9807-5.

Dr. Jonathan Dubnov

Publications:

Svechkina, A., **Dubnov, J.**, & Portnov, B. (2018). Environmental risk factors associated with low birth weight: The case study of the Haifa Bay Area in Israel. *Environmental Research,165*, 337-348

Dr. Roni Elran-Barak

Publications:

Elran-Barak, R., & Bar-Anan, Y. (2018). Implicit and explicit anti-fat bias: The role of weight-related attitudes and beliefs. *Social Science and Medicine, 204*, 117-124.

Elran-Barak, R., Barak, A., Cohen-Ashkenazi, S., & Schifter, T. (2018). Barriers to hospital admission among people with eating disorders: A qualitative internet-based study. *International Journal of Mental Health Nursing, 27(6),* 1784-1792.

Elran-Barak, R., Weinstein G., Schnaider Beeri, M. & Ravona, R. (2018). The associations between objective and subjective health among older adults with type 2 diabetes: The moderating role of personality. *Journal of Psychosomatic Research*, https://doi.org/10.1016/j.jpsychores.2018.12.011

Weinstein, G., **Elran Barak, R.**, Schnaider Beeri, M., & Ravona-Springer, R. (2018). Personality traits and cognitive function in old-adults with type-2 diabetes. *Aging Ment Health, 8*, 1-9.

Recent Grants:

Latzer, Y., & **Elran-Barak, R.** Implicit and explicit anti-fat bias among bariatric surgery candidates– The role of ethnicity. Funded by University of Haifa, Faculty of Social Welfare & Health Sciences.

Prof. Ronit Endevelt

Publications:

Endeweld, M., Goldsmith, R., & **Endevelt, R.** (2018). The demographic and morbidity characteristics of a population receiving food support in Israel. *Isr J Health Policy Res, 30, 7(1),* 54.

Ginzburg, Y., Shmilovitz, I., Monastyrsky, N., **Endevelt, R.**, & Shahar, D.R. (2018). Barriers for nutritional care in the transition from hospital to the community among older patients. *Clin Nutr ESPEN, 25*, 56-62.

Icht, M., Bergerzon-Bitton, O., Kachal, J., Goldsmith, R., Herzberg, O., & **Endevelt, R.** (2018). Texture-modified foods and thickened fluids used in dysphagia: Israeli standardised terminology and definitions. *J Hum Nutr Diet, 31(6),* 742-746.

Tamir, O., Cohen-Yogev, T., Furman-Assaf, S., & **Endevelt, R.** (2018). Taxation of sugar sweetened beverages and unhealthy foods: a qualitative study of key opinion leaders' views. *Isr J Health Policy Res, 7(1),* 43. doi:10.1186/s13584-018-0240-1.

Prof. Anat Gesser-Edelsburg

Publications:

Gesser-Edelsburg, A., & Abed Elhadi Arabia, M. (2018). Discourse on Exposure to Pornography Content Online Between Arab Adolescents and Parents: Qualitative Study on its Impact on Sexual Education and Behavior. *Journal of Medical Internet Research, 20(10),* e11667.

Gesser-Edelsburg, A., Cohen, R., Mir Halavi, A., Zemach, M., van Heerden, V., Sviri, S., Benenson, S., Trahtemberg, U., Orenbuch-Harroch, E., Lowenstein, L., Shteinberg, D., Salmon, A., & Moses, A. (2018). Beyond the hospital infection control guidelines: a qualitative study using the Positive Deviance approach to achieve efficacy and clarity. *Antimicrobial Resistance and Infection Control*, *7(124*), https://doi.org/10.1186/s13756-018-0418-x

Gesser-Edelsburg, A., Diamant, A., Hijazi, R., & Mesch, G.S. (2018). Correcting misinformation by health organizations during measles outbreak: A controlled experiment. *PLoS ONE*, *13(12*), e0209505.

Gesser-Edelsburg, A., & Hijazi, R. (2018). The magic pill: the branding of impotence and the positioning of Viagra as its solution through edutainment. *Journal of Health Communication: International Perspectives, 23,* 281-290.

Gesser-Edelsburg, A., Zemach, M., Cohen, R., Salmon, A., Lowenstein, L., & Shteinberg, D. (2018). What variables are associated with the public's willingness to take measures to maintain a hygienic hospital environment? *American Journal of Infection Control, 46(11),* 1245-1253.

Golan, R., Kloog, K, Almog, R., **Gesser-Edelsburg, A.**, Negev, M., Vinter, M., Shalev, V., Aizenberg, V., Koren, G., & Levine, H. (2018). Environmental exposures and fetal growth: The Haifa pregnancy cohort study. *BMC Public Health, 18(132).* DOI 10.1186/s12889-018-5030-8.

Keisari, S., Yaniv, D., Palgi, Y., & **Gesser-Edelsburg, A.** (2018). Conducting playback theatre with older adults – A therapist's perspective. *The Arts in Psychotherapy, 60*, 72-81.

Magid, A., **Gesser-Edelsburg, A.**, & Green, M.S. (2018). The role of informal digital surveillance systems before, during and after infectious disease outbreaks: A critical analysis. 189-201. In V.Radosavljevic, I. Banjari, & G. Belojevic (eds.), *Defense against bioterrorism – Methods for prevention and control*. NATO Science for Peace and Security Series A: Chemistry and Biology. Dordrecht: Springer Science + Business Media B.V.

Prof. Anat Gesser-Edelsburg (continue)

Recent Grants:

Ben-Haim, Y., Avni, R., **Gesser-Edelsburg, A.**, Ben-Eliyahu, A., & Yahav, R. A surprise resistant readiness in extreme events: Multi-focus fires and earthquakes. Funded by The National Knowledge Center for Disaster and Emergency Management.

Gesser-Edelsburg, A., Lowenstein, L., Salmon, A., & Shteinberg, D. Developing a model based on the Positive Deviance strategy, to prevent hospital-acquired infections in Israel. Funded by The Israel National Institute for Health Policy Research.

Gesser-Edelsburg, A., Negev, M. Mesch, G., & Miron-Shatz, T. Earthquake preparedness experiment for developing strategies to motivate the Israeli public's Seismic adjustment behavior. Funded by State of Israel, Ministry of Science and Technology (MOST).

Feniger-Schaal, R., Keisari, S., Palgi, Y., **Gesser-Edelsburg, A.**, Yaniv, D., Ben-David, B., & Golland, Y. Mirror game in older adults and its influence on emotional, social indexes and cognitive performance among old people. Funded by University of Haifa, Faculty of Social Welfare & Health Sciences.

Levin, H., Golan, R., Kloog, I., Koren, G., Almog, R., **Gesser-Edelsburg, A.** Environmental Exposures and Fetal Growth: The Haifa Pregnancy Cohort Study. Funded by State of Israel, The Ministry of Environmental Protection.

Prof. Manfred Green

Publications:

Green, M.S., LeDuc, J., Cohen, D., & Franz, D.R. (2019). Confronting the threat of bioterrorism: realities, challenges, and defensive strategies. *Lancet Infect Dis, 19(1): e2-e13.* doi: 10.1016/S1473-3099(18)30298-6.

HaGani, N., Hayek, S., Tarabeia, J., Yehia, M., & **Green, M.S.** (2018). Fear of catastrophic health expenditures and unrealistic expectations from supplementary health insurance: Ethnic differences. *Int Health*, doi: 10.1093/inthealth/ihy089.

Magid, A., Gesser-Edelsburg, A., & **Green, M.S.** (2018). The role of informal digital surveillance systems before, during and after infectious disease outbreaks: A critical analysis. 189-201. In V.Radosavljevic, I. Banjari, & G. Belojevic (eds.), *Defense against bioterrorism – Methods for prevention and control*. NATO Science for Peace and Security Series A: Chemistry and Biology. Dordrecht: Springer Science + Business Media B.V.

Muhsen, K., **Green, M.S.**, Soskolne, V., Neumark, Y. (2018). Inequalities in non-communicable diseases in Israel - Authors' reply. *Lancet, 391(10120)*, 537. doi: 10.1016/S0140-6736(17)32452-2.

Peled-Raz, M., Perl, M., & **Green, M.S.** (2018). Treatment of un-accompanied minors in primary clinics - Caregivers practice and knowledge, *Israel Journal of Health Policy Research* 7, 29. DOI 10.1186/s13584-018-0217-0.

Schwartz, N., **Green, M.S.**, Yefet, E., Nachum, Z. (2018). Postprandial glycemic control during gestational diabetes pregnancy predicts the risk of recurrence. *Sci Rep, 8(1)*, 6350. doi: 10.1038/s41598-018-24314-1.

Recent Grants:

Green, M.S., Sznitman, S.R, & Dor, M. Assessing effectiveness and side effects of medical cannabis among oncology patients, doctors and nurses in Israel. Funded by The Israeli National Institute for Health Policy Research.

Prof. Lital Keinan-Boker

Publications:

Aflalo, E., Dichtiar, R., Zusman, S.P., Bilenko, N., & **Keinan Boker, L.** (2018). The association between health attitudes and behaviors and oral health-related practices. *Quintessence International, 49(2)*, 153-162.

Allemani, C., Matsuda, T., Di Carlo, V., Harewood, R., Matz, M., Nikšić, M., Bonaventure, A., Valkov, M., Johnson, C.J., Estève, J., Ogunbiyi, O.J, Azevedo, E., Silva, G., Chen, W.Q., Eser, S., Engholm, G., Stiller, C.A., Monnereau, A., Woods, R.R., Visser, O., Lim, G.H., Aitken, J., Weir, H.K., Coleman, M.P. & CONCORD Working Group. (2018). Global surveillance of trends in cancer survival 2000-14 (CONCORD-3): analysis of individual records for 37 513 025 patients diagnosed with one of 18 cancers from 322 population-based registries in 71 countries. *Lancet, 391(10125)*, 1023-1075.

Attias, S., Schiff, E., Arnon, Z., Ben-Arye, E., Keshet, Y., Matter, I., & **Keinan Boker, L**. (2018). Development and validation of a tool to evaluate Inpatient Beliefs, Expectations and Attitudes toward Reflexology (IBEAR-16). *Complementary Therapies in Medicine, 37*, 69-76.

Berman, T., Barnett-Itzhaki, Z., Axelrod, R., **Keinan-Boker, L.**, Shimony, T., Goldsmith, R., Göen, T., Geva, H., & Rosen, L. (2018). Socioeconomic inequalities in exposure to environmental tobacco smoke in children in Israel. *Environment International, 121*, 643-648.

Berman, T., Barnett-Itzhaki, Z., Mery, N., **Keinan-Boker, L.**, Shimony, T., Goldsmith, R., Goen, T., Geva, H., & Rosen, L. (2018). Exposure to Environmental Tobacco Smoke in Non - Smoking Adults in Israel: Results of the Second Israel Biomonitoring Survey. *Israel Journal of Health Policy Research, 7*, 33.

Buch, A., **Boker-Keinan, L.**, Kis, O., Carmeli, E., Itzhakov, E., Ish-Shalom, A., Berner, Y., Shefer, G., Marcus, Y., & Stern, N. (2018). Severe central obesity or diabetes can replace weight loss in the detection of frailty in obese younger elderly – a preliminary study. *Clinical Interventions in Aging, 13*,1907-1918.

Buch, A., Carmeli, E., Shefer, G., **Keinan Boker, L.**, Berner, Y., Marcus, Y., Goldsmith, R., & Stern, N. (2018). Cognitive impairment and the association between frailty and functional deficits are linked to abdominal obesity in the elderly. *Maturitas, 114*, 46-53.

Prof. Lital Keinan-Boker (continue)

Publications (continue):

Buch, A., **Keinan Boker, L.,** Berner, Y., Carmeli, E., Goldsmith, R., & Stern, N. (2018). Estimated frailty prevalence among Israeli elderly – results from a cross-sectional national survey. *Israel Journal of Health Policy Research, 7(1),* 18.

Castel-Cohen, O., Shadmy, E., **Keinan Boker, L.**, & Dagan, E. (2018). Reliability and validity of the Hebrew version of the Nijmegen Continuity Questionnaire for measuring patients' perceived continuity of care in oral anti-cancer therapy. *European Journal of Cancer Care*, 27, e12913.

Dankner, R., **Keinan-Boker, L.,** Boffetta, P., Balicer, R.D., Murad, H., Berlin, A., Olmer, L., Agay, N., & Freedman, L. (2018). A historical cohort study on glycemic-control and cancer-risk among patients with diabetes. *Cancer Epidemiology*, 57, 104-109.

Goldenshluger, A., Elazary, R., Cohen, M.J., Goldenshluger, M., Ben-Porat, T., Nowotni, J., Geraisi, H., Amun, M., Pikarsky, A.J., **& Keinan-Boker, L** (2018). Predictors for adherence to multidisciplinary follow up care after Sleeve Gastrectomy. *Obesity Surgery, 28(10),* 3054-3061.

Hamood, R., Hamood, H., Merhasin, I., & **Keinan-Boker, L**. (2018). Chronic pain and other symptoms among breast cancer survivors: prevalence, predictors and effects on quality of life. *Breast Cancer Research and Treatment, 167(1),* 157-169.

Hamood, R., Hamood, H., Merhasin, I., & **Keinan-Boker, L**. (2018). Diabetes following hormone therapy in breast cancer survivors: a case-cohort study. *Journal of Clinical Oncology, 36(20),* 2061-2069.

Hayek, S., Dichtiar, R., Shohat, T., Silverman, B.G., & **Keinan-Boker, L**. (2018). Risk for second primary neoplasm and mortality in childhood cancer survivors: a retrospective cohort study in multi-ethnic country (1980-2007). *Cancer Epidemiology*, 57, 127-133.

Katz, L.H., Levi, Z., Twig, G., Kark, J.D., Leiba, A., Derazne, E., Liphshitz, I., **Keinan Boker, L.,** Eisenstein, S., & Afek, A**.** (2018). Risk factors associated with Gastroenteropancreatic Neuroendocrine Tumors (GEP-NET) in a Cohort of 2.3 Million Israeli Adolescents. *International Journal of Cancer, 143,* 1876-1883.

Keinan Boker, L. (2018). Increased cancer incidence in Holocaust survivors and the implications for survivors of other extreme events [Invited Editorial]. *Expert Review of Anticancer Therapy, 18(11),* 1059-1062.

Prof. Lital Keinan-Boker (continue)

Publications (continue):

Keinan-Boker, L., Levine, H., Leiba, A., Derazne, E., & Kark, J.D. (2018). Adolescent obesity and adult male breast cancer in a cohort of 1,382,093 men. *International Journal of Cancer, 142(5),* 910-918.

Keinan Boker, L., Friedman, E., & Silverman, B.G. (2018). Trends in the incidence of primary brain, central nervous system and intracranial tumors in Israel, 1990-2015. *Cancer Epidemiology, 56*, 6-13.

Levi, Z., Kark, J.D., Twig, G., Katz, L., Leiba, A., Derazne, E., Tzur, D., Liphshitz, I., **Keinan Boker, L.**, & Afek, A. (2018). Body mass index at adolescence and risk of non-cardia gastric cancer in a cohort of 1.79 million men and women. *Cancer, 124(2),* 356-363.

Nuss, N., Libruder, C., Dichtiar, R., Weinstein, T., **Keinan-Boker, L.**, Shohat, T., & Golan, E. (2018). Cancer risk among children undergoing renal replacement therapy- results from the Israel National Renal Replacement Therapy Registry, 1990-2012. *Journal of Pediatric Hematology and Oncology, 40(8),* e525-e530.

Regev-Avraham, Z., Baron-Epel, O., Hammond, S.K., & **Keinan Boker, L.** (2018). Passive smoking, NAT2 polymorphism and breast risk in Israeli Arab women: a case-control study. *Breast Cancer, 25(2),* 176-184.

Recent Grants:

Keinan Boker, L., Cohen, O., Dagan, E., & Shadmi, E. Oncology healthcare teams usage of health information technologies for oral anti-cancer treatment coordination, and its effect on continuity of care and patients' adherence to treatment. Funded by The Israel National Institute for Health Policy and Health Services Research.

Keinan Boker, L., Kark, J.D., Ben-Dov, I., & Klotstein, M. The association of exposure in adolescence to environmental pollution in the Haifa Bay Area with health outcomes at age 17, DNA/RNA markers of risk at age 18-22 and cancer incidence in adulthood. Funded by Ministry of Environment Protection

Keinan Boker, L., & Stern, N. The impact of Mediterranean diet and recurrent power exercise on elderly diabetics – a clinical trial. Funded by Strauss Institute for Research.

Prof. Yael Latzer

Publications:

Avraham, Y., **Latzer, Y**., & Berry, E. (2018). The Impact of Δ9-THC on the psychological symptoms of Anorexia Nervosa: an open-label trial. *Israel Journal of Psychiatry (Special issue on eating disorders), 54,* 44-51.

Dori-Frenkel, T., **Latzer, Y.**, & Lev, R. (2018). The relationship betweem super women model, self report image, and disordered eating pathology among ultraorthodox, and modern orthodox women in israel. *Israel Journal of Psychiatry (Special issue on eating disorders), 55,* 73-81.

Grundman Shem-Tov, R., Zubery, E., Loevy Hecht, N., & **Latzer, Y.** (2018). "A full stomach": Eating disorders among Ethiopian immigrants in Israel. *Israel Journal of Psychiatry, 55,* 22-31.

Gur, E., **Latzer, Y**., & Stein, D. (2018). Editorial: New Horizons in the Classification, Biology and Management of Eating Disorders. *Israel Journal of Psychiatry (Special issue on eating disorders), 54,* 3-7.

Hason-Rozenstein, M., Stein, D., & **Latzer, Y.** (2018). Subjective and objective: Alexithymia, and Social Cognition in Eating Disorders. *Israel Journal of Psychiatry (Special issue on eating disorders), 55,* 45-54.

Latzer, Y., Elron Yutal, A., Givon, M., Kabakov, O., Alon, S., Zuckerman-Levin, N., Rozenstain-Hason, M., & Tzischinsky, O. (2018). Dietary patterns of patients with binge eating disorders with and without night eating syndrome. *Eating and weight disorder – Studies on Anorexia, Bulimia and Obesity,* DOI https://doi.org/10.1007/s40519-018-0590-2 https://doi.org/10.1007/s40519-018-0590-2.

Latzer, L., Tzischinsky, O., Spivak-Lavi, Z., Chen, I., & Weinberger-Litman, S. (2018). The relationship between disordered eating pathology, sense of coherence and body image among adolescent boys in Israel. *Israel Journal of Psychiatry (Special issue on eating disorders), 55,* 66-72.

Sarner-Kanyas, K., Canetti, L., **Latzer, Y.,** Lerer, B., & Bachar, E. (2018). Anorexia nervosa, selflessness and gender role identity: a study of daughters and parents. *Israel Journal of Psychiatry* (*Special issue on eating disorders), 55,* 25-34.

Prof. Yael Latzer (continue)

Publications (continue):

Vissoker, R.E., Berger, D., **Latzer, Y.**, & Gal, E. (2018). Food selectivity gastrointestinal symptoms and urine organic acids in autism spectrum disorder: A pilot study. *Current Nutrition and Food Science, 14(2),* 171-179.

Weinberger-Litman, S, **Latzer, Y.,** Litman, L., & Ozick, R. (2018). Extrinsic religious orientation and disordered eating pathology among modern orthodox Israeli Adolescents: The mediating role of adherence to the Superwoman Ideal and Body Dissatisfaction. *Journal of Religion and Health, 57 (1), 209-222.* DOI 10.1007/10943-017-0443-8.

Recent Grants:

Latzer, Y., & Elran-Barak, R. Implicit and explicit anti-fat bias among bariatric surgery candidates– The role of ethnicity. Funded by University of Haifa, Faculty of Social Welfare & Health Sciences.

Prof. Shai Linn

Publications:

GBD 2016 alcohol collaborators. Griswold, M.G., et al. (2018). Alcohol use and burden for 195 countries and territories, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet, 392(10152),* 1015-1035. doi: 10.1016/S0140-6736(18)31310-2.

GBD 2016 Healthcare Access and Quality Collaborators. Fullman, N., et al. (2018). Measuring performance on the Healthcare Access and Quality Index for 195 countries and territories and selected subnational locations: a systematic analysis from the Global Burden of Disease Study 2016. *Lancet, 391(10136),* 2236-2271. doi: 10.1016/S0140-6736(18)30994-2.

GBD 2017 Causes of Death Collaborators. Roth, G.A., et al. (2018). Global, regional, and national age-sex-specific mortality for 282 causes of death in 195 countries and territories, 1980-2017: A systematic analysis for the Global Burden of Disease Study 2017. *Lancet, 392(10159),* 1736-1788. doi: 10.1016/S0140-6736(18)32203-7.

Prof. Shai Linn (continue)

Publications (continue):

GBD 2017 DALYs and HALE Collaborators. Dicker, D., et al. (2018). Global, regional, and national disability-adjusted life-years (DALYs) for 359 diseases and injuries and healthy life expectancy (HALE) for 195 countries and territories, 1990-2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet, 392(10159),* 1859-1922. doi: 10.1016/S0140-6736(18)32335-3.

GBD 2017 Mortality Collaborators. (2018). Global, regional, and national age-sex-specific mortality and life expectancy, 1950-2017: A systematic analysis for the Global Burden of Disease Study 2017. *Lancet, 392(10159),* 1684-1735. doi: 10.1016/S0140-6736(18)31891-9.

GBD 2017 Risk Factor Collaborators. Stanaway, J.D., et al. (2018). Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks for 195 countries and territories, 1990-2017: A systematic analysis for the Global Burden of Disease Study 2017. *Lancet, 392(10159),* 1923-1994. doi: 10.1016/S0140-6736(18)32225-6.

GBD 2017 SDG Collaborators. Lozano, R., et al. (2018). Measuring progress from 1990 to 2017 and projecting attainment to 2030 of the health-related Sustainable Development Goals for 195 countries and territories: A systematic analysis for the Global Burden of Disease Study 2017. *Lancet, 392(10159),* 2091-2138. doi: 10.1016/S0140-6736(18)32281-5.

GBD Collaborators. Cowan, A.J., et al. (2018). Global burden of Multiple Myeloma: A systematic analysis for the Global Burden of Disease Study 2016. *JAMA Oncology*, doi:10.1001/jamaoncol.2018.2128

GBD Collaborators. Fitzmaurice, C., et al. (2018). Global, regional, and national cancer incidence, mortality, years of life lost, years lived with disability, and disability-adjusted life-years for 29 Cancer Groups, 1990 to 2016: A systematic analysis for the Global Burden of Disease Study. *JAMA Oncology*, doi: 0.1001/jamaoncol.2018.2706.

Prof. Shai Linn (continue)

Publications (continue):

GBD Collaborators. Roth, G.A., et al. (2018). The Burden of Cardiovascular Diseases among US States, 1990-2016. *JAMA Cardiology, 3(5),* 375-389.

doi: 10.1001/jamacardio.2018.0385.

Global Burden of Disease 2016 Injury Collaborators, Naghavi, M., et al. (2018). Global mortality from firearms, 1990-2016. *JAMA, 320(8),* 792-814.

doi: 10.1001/jama.2018.10060.

Global Burden of Disease Cancer Collaboration. Fitzmaurice, C., et al. (2018). Global, regional, and national cancer incidence, mortality, years of life lost, years lived with disability, and disability-adjusted life-years for 29 cancer groups, 1990 to 2016: A Systematic Analysis for the Global Burden of Disease Study. *JAMA Oncol, 4(11),* 1553-1568. doi: 10.1001/jamaoncol.2018.2706.

Global Burden of Cardiovascular Diseases Collaboration. Roth, G.A., et al. (2018). The burden of cardiovascular diseases among US States, 1990-2016. *JAMA Cardiology, 3(5),* 375-389. doi: 10.1001/jamacardio.2018.0385.

Grunau, G.L., Gueron, S., Pornov, B., & **Linn, S.** (2018). The risk of cancer might be lower than we think. Alternatives to lifetime risk estimates. *Rambam Maimonides Medical Journal, 9(1),* 2-17.

Grunau, G., & **Linn, S**. (2018) Commentary: Sensitivity, specificity, and predictive values: Foundations, pliabilities, and pitfalls in research and practice. *Frontiers of Public Health, 6,* 256. doi: 10.3389/fpubh.2018.00256.

Grunau, G., & **Linn, S.** (2018). Detection and diagnostic overall accuracy measures of medical tests. *Rambam Maimonides Med J, 9 (4),* e0027. doi:10.5041/RMMJ.10351.

Dr. Maya Negev

Publications:

Berman, T., Barnett-Itzhaki, Z., Reicher, S., Ardi, R., Shammai, Y., Aruas, L., & **Negev, M.** (2018). Lead in Spray Paint and Painted Surfaces in Playgrounds and Public Areas in Israel: Results of a Pilot Study. *Science of the Total Environment*, 637-638, 455-459.

Golan, R., Kloog, I., Almog, R., Gesser-Edelsburg, A., **Negev, M.**, Jolles, M., Shalev, V, Eisenberg, V.A., Koren, G., Abu Ahmad, W., & Levine, H. (2018). Environmental exposures and fetal growth: the Haifa pregnancy cohort study. *BMC Public Health, 18(1),* 132.

Negev, M., Berman, T., Reicher, S., Balan, S., Soehl, A., Goulden, S., Ardi, R., Shammai, Y., Hadar, L., Blum, A., & Diamond, M.L. (2018). Regulation of chemicals in children's products: How U.S. and EU regulations impact smaller markets. *Science of the Total Environment, 616-617*, 462-471.

Negev, M., Berman, T., Reicher, S., Sadeh, M., Ardi, R., & Shammai, Y. (2018). Concentrations of trace metals, phthalates, bisphenol A and flame-retardants in toys and childcare products in Israel. *Chemosphere, 192,* 217-224.

Negev, M, Teschner, N., Rosenthal, A., Levine, H., Lew-Levy, C., & Davidovitch, N. (2018). Adaptation. of health systems to climate-related African migration: closing the gap. *International Journal of Hygiene and Environmental Health*, https://doi.org/10.1016/j.ijheh.2018.10.004

Schmidt, N., Teschner, N., & **Negev, M.** (2018). Scientific Advice and Administrative Traditions: The Role of Chief Scientists in Climate Change Adaptation. *Review of Policy Research*, https://doi.org/10.1111/ropr.12295

Zarhin, D., **Negev, M.**, Vulfson, S., & Sznitman, S. (2018). Rhetorical and regulatory boundary work: The case of medical cannabis policy-making Israel. *Social Science and Medicine, 217,* 1-9.

Recent Grants:

Negev, M. National assessment of ecosystem services and wellbeing. Funded by Hamaarag, Tel Aviv University.

Dr. Maya Negev (continue)

Recent Grants (continue):

Negev, M., Berman, T., Reicher, S., & and Ardi, R. Environmental chemicals in toys and baby products: Quantitative analysis and regulatory assessment. Funding by The Environment and Health Fund.

Negev, M., Feitelson, E., & Razin, E. Overcoming the implementation gap: Fitting policy packages for retrofitting buildings to local authorities in Israel. Funded by Ministry of Science.

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Dr. Maya Peled-Raz

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Dr. Rana Shibli

Publications:

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Prof. Shmuel Rishpon

Publications:

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Prof. Kerem Shuval

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Dr. Sharon Sznitman

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Dr. Galit Weinstein

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Prof. Shira Zelber-Sagi

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Prof. Shira Zelber-Sagi (continue)

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