

# Road-Map to Commercializing Medical Cannabis Innovation: from Lab to Patient

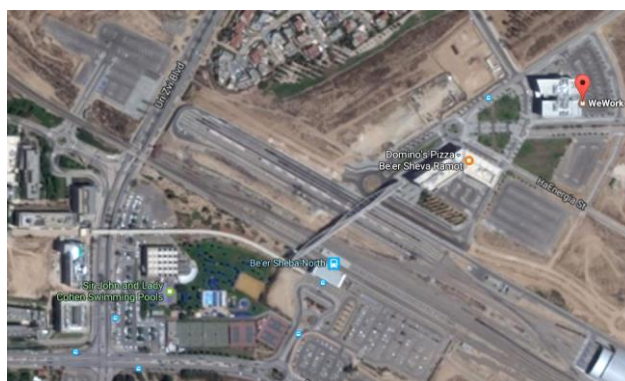
**מדריך למסחור חדשנות בקנאביס רפואי: מהמחקר במעבדה לחולה**

The conference will be held at **WeWork**, 16 Helkikei Haor St., bldg. no. 2, 3<sup>rd</sup> floor, Gev Yam Tech Park Beer-Sheva; Wednesday, **January 11, 2017; 17:30 to 20:00**

**for Waze™: type WeWork Beer-Sheva; by train: Beer- Sheva North Station.**

הכנס יערך ביום רביעי, ה-11 בינואר 2017, בשעות 17:30 עד 20:00, ב- **WeWork**, מתחם גב-ים, רחוב חלקיקי האור 16, בניין מספר 2, קומה 3 באר-שבע.

**הגעה ברכב: להקליד בוייז WeWork באר-שבע. הגעה ברכבת: תחנת באר שבע צפון (אוניברסיטה בן גוריון).**



# Road-Map to Commercializing Medical Cannabis Innovation: from Lab to Patient

**מדריך למסחור חדשנות בקנאביס רפואי: מהמחקר במעבדה לחולה**

On 11<sup>th</sup> January 2017, at WeWork Beer-Sheva, we will be holding a first of its kind meeting to present a road-map for medical cannabis ventures to follow in order to be successful. This meeting will provide an integrated overview of intellectual property, clinical trial data, regulatory affairs and business investment opportunities, essential for physicians, researchers, and entrepreneurs active in medical cannabis. Several key experts in medical cannabis will describe the different disciplines vital for growth in this area.



# Road-Map to Commercializing Medical Cannabis Innovation: from Lab to Patient

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|--------------|--|
| 17:30-18:00  | <b>Registration &amp; BEER</b>   |
| 18:00-18:15  | <b>History &amp; Future of Cannabis Clinical Research - Keynote Lecture</b><br><i>Prof. Zvi Bentwich, Head, CEMTA at Ben Gurion University</i>   |
| 18:15-18:25  | <b>Patent Trends in Canna-Tech</b><br><i>Dr Keren Hagai, Patent Attorney, Head of Life Sciences</i>  |
| 18:25-18:40  | <b>Life Threatening Idiopathic Recurrent Angioedema Responding to Cannabis</b><br><i>Dr. Amit Frenkel, General Intensive Care Unit, Soroka Medical Center</i>  |
| 18:40-18:50  | <b>Marijuana, Wearables &amp; the Internet of Things</b><br><i>Dr. Moti Zwilling (Computer Science, Business Administration), Adv.</i>   |
| 18:50-19:00  | <b>Overcoming Barriers in Protection for Marijuana and Cannabis Trademarks</b><br><i>Aviv-Nicolas Pollak, Adv., Trademark Dept.</i>  |
| 19:00-19:10  | <b>The Israel Medical Cannabis Reform: New Regulatory Structure for Research, Manufacturers, Clinics and Patients</b><br><i>Benny Shimony, Adv., Oded Steiff, Sides &amp; Co. Law offices</i>        |
| 19:10-19:25  | <b>Evidence Based Medicine Approach to Medical Cannabis - Keynote lecture</b><br><i>Prof. Victor Novack, Head, Clinical Research Center and Research Authority, Soroka University Medical Center</i> |
| 19:25-19:35  | <b>Financial Valuation of Medical Cannabis Patents</b><br><i>Dr Ilan Riess, Scientific Associate</i>   |
| 19:35-19:45  | <b>Epidemiological Characteristics of Patients Treated with Medical Cannabis</b><br><i>Lihl Bar-Lev Schleider, Research Manager at Tikun-Olam</i>  |
| 19:45-20:00  | <b>Economic Aspects of Medical Cannabis Regulation: Pharma Approach vs. Whole-Plant Synergy</b><br><i>Dr. Revital Duvdevani, CEO Pharmaseed Ltd</i>  |
| 20:00-20:10  | <b>Medical Cannabis in China</b><br><i>Dr Liming Wang, Scientific Associate</i>  |
| 20:10:-20:15 | <b>Farewell Remarks</b><br><i>Dr Joe Wyse, Patent Attorney, Head of Patent Department</i>  |

## History & Future of Cannabis Clinical Research

**Prof. Zvi Bentwich**      **Ben Gurion University, Israel**

Professor Zvi Bentwich, is a physician clinical immunologist and world-renowned expert on AIDS research, with vast clinical, educational and biomedical research experience. He was the first physician to deal with AIDS in Israel since 1982, and founded the first and largest AIDS center in the country. Professor Bentwich is Professor Emeritus of Medicine of the Hebrew University Hadassah Medical School and currently, Professor of Microbiology Immunology and Genetics, and head of the Center for Emerging Tropical Diseases & AIDS, at the Ben Gurion University. He is author of over 270 peer reviewed scientific publications. Between 2002 to 2009, Dr. Bentwich was chief scientist of Rosetta Genomics Inc, (NASDAQ ROSG) and since 2012 he is the scientific director of the Ein Gedi – Dead Sea Arava Science Center where he is deeply involved in studies of medicinal plants and the skin microbiome. Since 2015 he is also chief scientist of Tikun Olam Ltd, the largest medical cannabis company in Israel, where he leads several clinical trials of cannabis. Professor Bentwich has been board member (2002-2014) and chairman (2010-2012) of Physicians for Human Rights, Israel. Among other awards, he has received in 2010 a lifetime award from the Israeli Knesset for his contributions to Israel Medicine and Medical Sciences.



## Evidence Based Medicine Approach to Medical Cannabis

**Prof. Victor Novack      Head of Soroka Clinical Research Center**

Prof. Victor Novack MD, PhD is a founding director of Soroka Clinical Research Center. Prior to his current position, Prof. Novack served as a Medical Director at Harvard Clinical Research Institute. His epidemiology training allows for the bridging a gap between the clinical questions and statistical apparatus. He has designed and contributed to the design of more than 50 feasibility and pivotal trials for FDA approval. Prof. Novack is Professor of Medicine at Faculty of Health Sciences at Ben-Gurion University, attending in the Division of Medicine at Soroka University Medical Center and Senior Scientist at Beth Israel Deaconess Medical Center, Harvard Medical School. He is an Associate and Statistical Editor of the European Journal of Internal Medicine. He has more than 150 scientific publications in peer reviewed journals.



# Life Threatening Idiopathic Recurrent Angioedema Responding to Cannabis

**Dr. Amit Frenkel**

**Head of Critical Care Unit, Soroka Medical Center**

Dr. Amit Frenkel is the head of the critical care outreach unit at Soroka University Medical Center and head of the Department of Emergency Medicine in the Faculty of Health Sciences of Ben-Gurion University of the Negev (BGU).

Dr. Frenkel is a lecturer at the school of Medicine, Faculty of Health Sciences, Ben Gurion University of the Negev. As a member of the Israeli General Intensive Care Association, he is the chairman of the Intensive Care Exams Committee. Dr Frenkel has accomplished many



awards, citations, honors and Competitive Fellowships. In recent years he accomplished the CEO Prize for Excellent Work at Clalit Health Services and has been awarded an excellent Lecturer at the Faculty of Health Sciences at the Ben Gurion University of the Negev.

# Epidemiological Characteristics of Patients Treated with Medical Cannabis

**Lihi Bar-Lev Schleider      Research Manager, Tikun Olam Ltd.**

Lihi Bar-Lev Schleider, MA, is the founder of the Research department at Tikun Olam, the first and largest medical cannabis supplier in Israel.

She received her Master of Arts in Psychobiology at the Tel Aviv University and is currently a PhD student in medicine at the clinical research center in Soroka and Ben Gurion University.



As a Research Manager in Tikun-Olam, Lihi lead all stages of clinical trials, including writing research protocols, and initiating, monitoring and analyzing the data of the clinical trials and studies. Three studies were published and 13 are currently in process.

In addition, Lihi manages all data collection of Tikun-Olam's patients (about 7,000 patients and an increase of approximately 250-300 patients per month). She facilitated the analysis of this data to match specific varieties of cannabis to specific symptoms, conditions, and target populations, including finding effective doses and identifying side effects.

## **Economic Aspects of Medical Cannabis Regulation: Pharma Approach vs. Whole-Plant Synergy**

### **Dr. Revital Duvdevani      Pharmaseed Ltd**

Dr Duvdevani has a Ph.D. from the Weizmann Institute, performed her post doctorate studies at Rutgers University in the US and an MBA. Dr Duvdevani has significant experience in managing R&D in biotechnology start-ups in addition to academic activity as a lecturer at the Department of Biotechnology Ben-Gurion University. She served as Pharmaseed's VP R&D from 2010 to 2011. From 2011 to 2016, she was director at the Weizmann Institute of Science, Davidson Institute. As of June 2016, she is acting as Pharmaseed's CEO.





## **The Israel Medical Cannabis Reform: New Regulatory Structure for Research, Manufacturers, Clinics and Patients**

**Benny Shimony, Adv.            Oded Steiff, Sides & Co. Law offices**

Adv. Benny Shimony leads the Beer-Sheva branch of Oded Steiff, Sides & Co. Law offices. Adv. Shimony is responsible for obtaining regulatory permits and licenses for cannabis producers, growers, manufacturers and importers. Adv. Idan Sides is the partner responsible for the firm's IP department specializing in enforcement of IP rights before all judicial and governmental authorities (Copyright, Patent, Trade Marks, PBR, Trade Secrets).The firm represents leading multinational corporations in enforcement of their IP rights.

## Patent Trends in Medical Canna-Tech

### **Dr. Keren Hagai     Dr. Eyal Bressler & Co. Ltd.**

Keren heads the Life Science Dept., and has expertise in a variety of IP aspects in Biotech and Agriculture. Dr Hagai has particular experience in the areas of seed and plant technology, improved seed traits, classical breeding, plant genetics, new plant varieties and molecular biology. She has vastly practiced patent searches and analysis, patent strategy, patent drafting, patent prosecution, and FTO and patentability opinions. Keren holds Ph.D. (Biochemistry), M.Sc. (Plant Sciences) and B.Sc. (Biology), all from the Tel Aviv University.



## Financial Valuation of Medical Cannabis technologies and IP thereof

### **Dr. Ilan Riess     Dr. Eyal Bressler & Co. Ltd.**

Ilan heads the PBR Dept. and is a patent expert and a CRO, which has a vast experience in research and development, specializing in different scientific fields. He has manager experience, including administering budgets, problem solving, and ensuring organization. He worked with extremely complex techniques that require high levels of preparation, rapid situation assessment, flexibility and adjustment of strategies. His multicultural background provides him with singular perspective on the tasks at hand. Ilan holds Ph.D. in Molecular Medicine, Biochemistry and Cellular Biotechnology; M.Sc. in Molecular Biotechnology and B.Sc. in Molecular Biotechnology, all titles are from the University of Turin (Italy).



## Overcoming barriers in protection for Marijuana & Cannabis Trademarks

### **Aviv-Nicolas Pollak, Adv. Dr. Eyal Bressler & Co. Ltd.**

Aviv heads the Brand Protection & Enforcement Department and advises on trademarks and trademark related aspects, general intellectual property rights protection, enforcement, computer and internet law, various agreements and UDRP proceedings (domain names). Aviv holds LL.B & LL.M (OAC / Columbia University in the City of New York).



## Marijuana, Wearables & the Internet of Things

### **Dr. Moti Zwilling (Computer Science, Business Administration), Adv. Dr. Eyal Bressler & Co. Ltd.**

Dr. Moti Zwilling is affiliated to the senior academic staff at the Department of Business Administration and the Cyber Technology Research Center in Ariel University. Dr. Zwilling is recognized in Intelligent Information Systems and Cyber Security and has held several leading and consulting positions in the industry in firms such as Gilat Satellite Networks, Check-Point, Teva, Applied Materials and the Ministry of Defense directly related to this field. His main areas of expertise are: cyber security data mining and machine learning, pattern recognition and big data analysis especially in business oriented Decision Support Systems. Dr. Zwilling holds a B.Sc., M.Sc. in Computer Science and Biology from Bar-Ilan University, Ph.D., in Computer Science and Biology from The Hebrew University of Jerusalem and M.B.A., Ph.D., in Marketing from Bar-Ilan University. He also has B.A. and M.A in Law and is a certified lawyer of the Israeli bar association dealing with intellectual property cases. Dr. Zwilling had worked as post-doc fellow researcher at the Deutsche Telekom's laboratories in the domain of cyber security.



## Medical Cannabis in China

**Dr. Limin Wang      Dr. Eyal Bressler & Co. Ltd.**

Dr Wang has broad hands-on research experience in multiple fields, ranging from chemistry to nuclear medicine. In her graduate research, she developed a number of novel radiopharmaceuticals for early diagnosis of cancer. Her multicultural background enables her to handle international IP cases in Asia and North America with unique capability. Limin holds PhD (Biology) from the University of Pennsylvania (USA) and B.Sc. from Peking University (China).



## Monetizing Medical Cannabis with the IP Toolbox

**Dr Joe I Wyse & Dr Eyal Bressler      Dr. Eyal Bressler & Co. Ltd.**

Joe is responsible for managing patent strategy and analysis and has achieved notable success in achieving crucial defensive and offensive patent prosecutions and strategies, which have been often translated to high balance sheet values for our clients. Joe directs patent valuation, BD and CI analysis projects for validating that the technology our clients had selected is the best-suited for their needs. Joe holds Ph.D. (Genetics) from the University of London.



Prior to forming the firm and after spending 15 years at the Hebrew University of Jerusalem, Eyal served as the CEO of a successful venture capital fund investing in knowledge-intensive start-ups. Eyal's expertise in IP due diligence is renowned and materially impacts the client's business decisions. Being the author of various academic publications, Eyal is known as a professional who is knowledgeable, skilled and up-to-date. Eyal holds Ph.D. in Biotechnology from the Hebrew university of Jerusalem. He is patent attorney & attorney at law.

