

RESUME

13.10.18

1. PERSONAL DETAILS

Full Name: Mira Barak

Identification number: 069121531

Date and place of birth: 2.10.1953, Iasi, Rumania

Marital status: married, three children

Address: 133 Derech Hayam, Haifa, 3474838, Israel

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2. ACADEMIC DEGREES

1975 BSc (with distinction) Biology, The Technion -Israel Institute of Technology, Haifa, Israel

1979 MSc Food Engineering and Biotechnology, The Technion -Israel Institute of Technology, Haifa, Israel

1983 DSc Clinical Microbiology, The Rappaport Faculty of Medicine, The Technion -Israel Institute of Technology, Haifa, Israel

3. ACADEMIC APPOINTMENTS

2014-2018 Senior Lecturer, Zefat Academic College

2014-2016 Senior Lecturer (Affiliated) The Rappaport Faculty of Medicine, The Technion - Israel Institute of Technology.

2000-2004 Senior Lecturer (Affiliated) The Rappaport Faculty of Medicine, The Technion - Israel Institute of Technology.

1987-1989 Post Doctorate Fellow, The Rappaport Faculty of Medicine, The Technion -Israel Institute of Technology.

1983-1984 Research fellow, Food Engineering and Biotechnology, The Technion -Israel Institute of Technology.

- 1979-1983 Instructor, The Rappaport Faculty of Medicine, The Technion -Israel Institute of Technology.
- 1975-1979 Instructor, Food Engineering and Biotechnology, The Technion -Israel Institute of Technology
- 2000-2004 Affiliated Senior lecturer, The Rappaport Faculty of Medicine, The Technion - Israel Institute of Technology.
- 2014-2016 Affiliated Senior lecturer, The Rappaport Faculty of Medicine, The Technion - Israel Institute of Technology.

4. PROFESSIONAL EXPERIENCE

- 2004-2006 Project leader, Clalit Gigalab, Clalit Health Services
- 2002-2004 Project advisor, "The Pearl of Science " Rehovot, Clalit Health Services
- 2000-2002 Assistant Deputy Manager for Logistics and Infrastructure, Clalit Health Services
- 1996-present General Director of Haifa and Western Galilee Central Laboratories, Clalit Health Services
- 1996-2006 Head of Biochemistry, Serology, Tumor Markers labs, Haifa and Western Galilee Central Laboratories, Clalit Health Services
- 1986-1996 Head of Research and Development Unit, Biochemistry Department, Carmel Hospital, Clalit Health Services
- 1984-1985 Project leader Research and Development, Lidex Corporation, Technion City.
- 1975-1977 Epidemiology officer of the Northern area-IDF

RESEARCH INTERESTS

- clinical laboratory management
- IT solutions for clinical labs
- evidence based laboratory medicine
- laboratory QC, automation and autovalidation.
- tumor markers
- modulation of cellular mediated immunity
- autoimmunity - especially ANA and celiac tests
- TORCH panel

5. TEACHING EXPERIENCE

- 2015-2018 Medical Sciences: Microbiology, Autoimmune diseases and Tumor markers. Zefat Academic College- frontal lectures and internships of 10-12 students each year.
- 2014-2016 Clinical Biochemistry, Medical Sciences, The Rappaport Faculty of Medicine, The Technion –Israel Institute of Technology. The teaching included frontal lectures and being in charge of the internships of 4-8 students each semester.
- 2000-2004 Clinical Biochemistry, Medical Sciences, The Rappaport Faculty of Medicine, The Technion –Israel Institute of Technology. The teaching included frontal lectures and being in charge of the internships of 4-8 students each semester.
- 1996-1997 Tumor Markers Course for Specialists, Sackler Faculty of Medicine, School of Continuing Medical Education, Tel-Aviv University.
- 1995 Tumor Markers Oncology, Course for senior oncologists, Rambam Medical Center.
- 1995 Tumor Markers Oncology, Course, Carmel Medical Center.
- 1994 Tumor Markers, Hebrew University, Institute of Postgraduate Medical Education, Hadassah Medical School.
- 1994 Tumor Markers Course, Northern Area, Clalit Health Services.
- 1993 Tumor Markers, Hebrew University, Institute of Postgraduate Medical Education, Hadassah Medical School.
- 2015-2016 Medical Laboratory Sciences, Zefat Academic College. Lecturing and internships.

6. PUBLIC PROFESSIONAL ACTIVITIES

NATIONAL

1996 - present: Clalit Health Services:

Head of Immunology scientific committee,
Participation in Biochemistry, Hematology, Microbiology, Endocrinology
scientific committees.

Participation in data base and informatics committee.

2012- present: Ministry of Health:

Head of Immunology committee approving senior laboratory immunologists.

Certificates: Ministry of Health : 1996 Clinical Laboratory # 13077

2008 Clinical Laboratory # 31-85204

2010 Authorization for running multidisciplinary
clinical laboratory # 17-95961

1993- Health Services Management, Haifa University

2014- GCP

INTERNATIONAL

-2014 Reviewer: Clinical and Experimental Gastroenterology,
Pharmacogenomics and Personalized Medicine
Clinical Chemistry and Laboratory Medicine
ClinicoEconomics and Outcomes Research
Nutrients
Infection and Drug Resistance
World Journal of Gastroenterology
Thrombosis and Haemostasis
Clinica Chimica Acta
International Journal of Medical Informatics

-2010, 2011, 2012 Convocations of experts in laboratory quality

-2003, 2005 Convocations of experts in automation

-2000 guidelines for tumor markers

-2010 guidelines for ANA tests

7. MEMBERSHIP IN PROFESSIONAL SOCIETIES

INTERNATIONAL

AACC - American Association for Clinical Chemistry
IFCC - International Federation of Clinical Chemists
AAAS- American Association for the Advancement of Science
ALA- Association for Laboratory Automation
AACC- Divisions: Clinical/Diagnostic Immunology, Management Sciences

NATIONAL

ISLM - Israel Society for Laboratory Medicine

8. HONORS

- 1995 Centocor Winner of the prize on Lung Cancer.
- 1994 Israel Cancer Society traveling award.
- 1993 IFCC 1993 Traveling Scholarship.
- 1992 Ministry of Health Fund on cancer research.
- 1988 Israel Cancer Society traveling award.
- 1987 Pikovsky – Vallazi Fund Scholarship for a Post Doc. Student.
- 1983 Israel Society for Microbiology Award on behalf of Dr. W. Hirsh for a prominent young scientist.
- 1982 Gutwirth Fund Scholarship for an outstanding Ph.D student.

9. GRADUATE STUDENTS

(Instructor in charge without official University affiliation.)

- 1997 Pritzker I, Pediatrics Specialist Thesis-Technion.
- 1997 Cohen M, Technion MD Thesis.
- 1996 Doweck I, Technion ENT Specialist Thesis.
- 1994-1995 Nizri M, Technion M.D. thesis.
- 1991-1992 Maghen D, Technion M.D thesis.
- 1988-1989 Shaer B, Technion M.D thesis.
- 2011-present Scheider Y, PhD thesis, Haifa University.
- 2014-present Daniel R, PhD thesis, Haifa University.

10. RESEARCH GRANTS

- 1999-2000 f-PSA for Roche Diagnostics ,
- 2000-2002 c-PSA for Bayer

11. SIGNIFICANT PROFESSIONAL PROJECTS

- 1992 Tumor Markers Center for Clalit Health Services – Carmel Medical Center.
- 1996 Design, consolidation and management of the first multidisciplinary Laboratory in Clalit Health Services – Haifa and Western Galilee.

1998	ISO – 9002 – First accreditation of a clinical laboratory in Israel.
1999	Introduction of automation in Clalit laboratories.
1999-2001	Clalit laboratories “The Pearl of Science “ Rehovot –design and workflow.
2000, 2002	“Clalit laboratories –whereto?” CEO invited scientific review for the next 10 years.
2004-2006	Clalit Gigalab-Atidim –Design, workflow, information and automation flow.
2004	Autreach program- IT unique program for community samples retrieval and a paperless lab.

12. PUBLICATIONS

Theses

MSc thesis: Bacterial bioluminescence as an early indication of marine fish spoilage (1979).

PhD thesis: Study of phagocytosis and sera activity by luminous bacteria (1983).

Refereed papers in professional journals:

1. Basic research (Hypothesis-driven)

1. **Barak M**, Ulitzur S. Bacterial bioluminescence as an early indication of marine fish spoilage. *Eur J Appl Microbiol Biotechnol.* 1980; 10:155-165.
2. **Barak M**, Ulitzur S. The induction of bacterial luminescence system on solid medium. *Current Microbiol.* 1981; 5:299-302.
3. **Barak M**, Merzbach D, Ulitzur S. Determination of the serum bactericidal activity with the aid of luminous bacteria. *J Clin Microbiol.* 1983; 18:248-53.
4. **Barak M**, Ulitzur S, Merzbach D. Phagocytosis - induced mutagenesis in bacteria. *Mutat Res.* 1983; 121:7-16.
5. **Barak M**, Ulitzur S, Merzbach D. The use luminous bacteria for determination of phagocytosis. *J Immunol Method.* 1983; 64:353-63.
6. **Barak M**, Ulitzur S, Merzbach D. Elucidation of the phagocytosis mechanism with the aid of luminous bacteria. *J Med Microbiol.* 1984; 18:65-72.

7. **Barak M.** The role of oxygen-free radicals and their secondary production by PMN. A response. *Mutat Res.* 1984; 141:211.
8. **Barak M,** Merzbach D, Ulitzur S. A note on the increased permeability of opsonized luminous bacteria *J Appl Bacteriol.* 1985; 59:57-59.
9. Ulitzur S, **Barak M.** Detection of genotoxicity of metallic compounds by the bacterial bioluminescence test. *J Biolumin Chemilumin.* 1988; 2:95-9.
10. **Barak M,** Merzbach D, Gruener N. The effect of immunomodulators on PHA or gamma- IFN induced release of neopterin from purified macrophages and peripheral blood mononuclear cells (PBMC). *Immunol Lett.* 1989; 21:317-22.
11. **Barak M,** Merzbach D, Gruener N. Neopterin measured in serum and tissue culture supernates by a competitive enzyme linked immunosorbant assay. *Clin. Chem.* 1989; 35:1467-71.
12. **Barak M,** Merzbach D, Gruener N. IL-2 and neopterin- induced neopterin release from peripheral blood mononuclear cells. *Scand J Clin Lab Invest.* 1990; 50:705-14.
13. **Barak M,** Gruener N. Neopterin augmentation of tumor necrosis factor production. *Immunol Lett.* 1991; 30:101-6.
14. **Barak M,** Gruener N. The possible role of neopterin in the cell mediated immune response. *Biol Chem Hoppe-Seyler* 1992; 373:978-979.
15. **Barak M,** Younes H, Froom P. The effect of implementation of the ISO 9002 on customer complaints: a 5-year follow-up study in a regional laboratory. *Accreditation Quality Assurance.* 2003; 8:282-5.
16. **Barak M,** Jaschek R. A new and effective way for preventing pre-analytical laboratory errors. *Clin Chem Lab Med.* 2014; 52:e5-8.

2. Clinical Descriptive Research

1. **Barak M,** Mecz Y, Lurie A, Gruener N. Evaluation of prostate- specific antigen as a marker for adenocarcinoma of the prostate. *J Lab Clin Med.* 1989; 113:598-603.
2. **Barak M,** Mecz Y, Lurie A, Gruener N. Binding of serum prostate antigen to concanavalin A in patients with cancer or hyperplasia of the prostate. *Oncol.* 1989; 46:375-77.

3. Mecz Y, **Barak M**, Lurie A, Gruener N. The prognostic importance of the rate of decrease in prostate specific antigen levels after treatment of patients with carcinoma of prostate. *J Tumor Marker Oncol.* 1989; 4:323-8.
4. **Barak M**, Ginesin Y, Hornstein L, Levin DR, Gruener N. Excretion of urinary proteins induced by extracorporeal piezoelectric lithotripsy. *Brit J Urol.* 1990; 66:575-80.
5. **Barak M**, Steiner M, Finkel B, Abrahamson J, Antal S, Gruener N. Ca-15.3, TPA and MCA as markers for breast cancer. *Eur J Cancer.* 1990; 26:577-80.
6. Gruener N, Gross B, Gozlan O, **Barak M**. Increase in superoxide dismutase after cerebrovascular accident. *Life Sci.* 1994; 54:711-3.
7. Calderon I, **Barak M**, Abramovich H, Gruener N. Yavez H, Paz G, Homonnai ZT. The use of a seminal vesicle specific protein (MHS-5 antigen) for diagnosis of agenesis of vas deferens and seminal vesicles in azoospermic men. *J Androl.* 1994; 15:603-7.
8. **Barak M**, Gozlan O, Ciocanile V, Gruener N. False positive NSE with a Roche's mono-polyclonal kit. *J Tumor Marker Oncol.* 1994; 9:35-36.
9. **Barak M**, Stein A, Mecz Y, Lurie A, Gruener N. TNF and TPS levels in follow-up of BCG treated bladder cancer patients. *J Tumor Marker Oncol.* 1994; 9:119-24.
10. Mecz Y, **Barak M**, Stein A, Lurie A, Gruener N. Tumor necrosis factor and tissue polypeptide specific antigen levels in monitoring bladder cancer. *Diagnostic Oncol.* 1994; 4:148-52.
11. Dowek I, **Barak M**, Greenberg E, Uri N, Kellner J, Lurie M, Gruener N. Cyfra 21-1 - A new potential marker for squamous cell carcinoma of head and neck. *Arch Otolaryngol Head Neck Surg.* 1995; 121:177-81.
12. Matzkin H, **Barak M**, Braf Z. Effect of finasteride on free and total serum PSA in men with benign prostatic hyperplasia. *British J Urol.* 1996; 78:405-8.
13. Stein A, **Barak M**, Mecz Y, Lurie A. Serum Free/Total (F/T) PSA in prostate cancer patients treated with LH-RH agonists. *Eur Urol.* 1997; 32:64-8.
14. **Barak M**, Cohen M, Mecz Y, Stein A, Rashkovitzki R, Laver B, Lurie A. The additional value of free prostate specific antigen to the battery of age - dependent prostate-specific antigen, prostate-specific antigen density and velocity. *Eur J Clin Chem Clin Biochem.* 1997; 35:475-81.

15. Miller A, Gross B, Rawashdi BH, Almog R, Honigman S, Barak M, Gruener N. Changes in serum and cerebrospinal fluid superoxide dismutase and neurone-specific enolase following acute cerebral ischaemia. *Advances in critical care testing*. 1997;73-74.
16. Danino J, Yoachims HZ, **Barak M**. Predictive value of an adherence test for acute otitis media. *Otolaryngol Head and Neck Surg*. 1998; 118:400-3.
17. Nagler RM, **Barak M**, Peled M, Ben- Aryeh H, Filatov M, Laufer D. Early diagnosis and treatment monitoring roles of tumor markers Cyfra 21-1 and TPS in oral squamous cell carcinoma. *Cancer*. 1999; 85:1018-25.
18. Froom P, Bieganiec B, Ehrenrich Z, **Barak M**. Stability of common analytes in urine refrigerated for 24 h before automated analysis by test strips. *Clin Chem*. 2000; 46: 1384-6.
19. Dowek I, **Barak M**, N. Uri, Greenberg E. The prognostic value of the marker Cyfra 21-1 in carcinoma of head and neck and its role in early detection of recurrent disease. *Brit J Cancer*. 2000; 83:1696-701.
20. Froom P, Mahameed T, Havis R, **Barak M**. Effect of urgent clinical notification of low hemoglobin values. *Clin Chem*. 2001; 47:63-66.
21. Froom P, Abramova D, Bar-El M, **Barak M**. Reliability of delayed prothrombin time INR determinations in a central laboratory using off-site blood sampling. *Clin Lab Hematol*. 2001; 23:189-92.
22. Froom P, Miron E, **Barak M**. Oral anticoagulants in the elderly. *Brit J Hematol*. 2003; 120:526-8.
23. Hassan K, Shternberg L, Alhaj M, Giron R, Reshef R, **Barak M**, Kristal B. The effect of erythropoietin therapy and hemoglobin levels on the immune response to Engerix-B vaccination in chronic kidney disease. *Renal Fail*. 2003; 25:471-8.
24. Froom P, Grikshtas R, Havis R, **Barak M**. Adding a caveat to the urgent clinical notification of anemia does not reduce inappropriate emergency room referral rates. *Clin Lab Haem*. 2003; 25:149-53.
25. **Barak M**, Weinberger R. Outcome of IgM and IgG-seropositive cases of Varicella zoster in pregnancy. *J Reproduct Med*. 2004; 49: 38-40.
26. Froom P. **Barak M**. An informed consent form for treatment with oral anticoagulants. *J Thromb Haemost*. 2004; 2:196-7.

27. Froom P, Etzion R, **Barak M**. What is an abnormal urinary erythrocyte count as measured by test strips? *Clin Chem*. 2004; 50: 673-5.
28. Froom P, Neck A, Shir M, Haavis R, **Barak M**. Automatic laboratory-initiated reflex testing to identify patients with autoimmune hemolytic anemia *Am J Clin Pathol*. 2005; 124:129-32.
29. **Barak M**, Weinberger R, Marcusohn J, Froom P. Harmonization of the Bayer ADVIA Centaur and Abbott AxSYM automated B-type natriuretic peptide assay in patients on hemodialysis. *Clin Chem Lab Med*. 2005; 43:554-6.
30. Weinberger R, Appel B, Stein A, Metz Y, Neheman A, **Barak M**. The pyruvate kinase isoenzyme M2 (Tu M2-PK) as a tumor marker for renal cell carcinoma *Eur J Cancer Care*. 2007; 16:333-7.
31. Ribak G, **Barak M**, Froom P. Older age is risk for an international normalized ratio (INR) of 5 or more. *Clin Lab*. 2007; 53:571-4.
32. Muhsen K, **Barak M**, Shifnaidel L, Nir A, Bassal R, Cohen D. *Helicobacter pylori* infection is associated with low serum ferritin levels in Israeli Arab children: a seroepidemiologic study. *J Pediatr Gastroenterol Nutr*. 2009; 49:262-4.
33. Froom P, Havis R, **Barak M**. The rate of manual peripheral blood smear reviews in outpatients. *Clin Chem Lab Med*. 2009; 47:1401-5.
34. **Barak M**, Schliamser JE, Yaniv N, Froom P. Ability of brain natriuretic peptide tests and homocysteine to exclude congestive heart failure. *The Open Clin Chem J*. 2010; 3: 1-4.
35. Froom P, **Barak M**. Prevalence and course of pseudothrombocytopenia in outpatients. *Clin Chem Lab Med*. 2011; 49:111-4.
36. Froom P, **Barak M**. False elevated prothrombin international normalized ratio values. *Am J Clin Pathol*. 2010; 134:86-9.
37. Muhsen K, **Barak M**, Henig C, Alpert G, Ornoy A, Cohen D. Is the association between *Helicobacter pylori* infection and anemia age dependent? *Helicobacter*. 2010; 15: 467-72.

38. Rozenberg O, Lerner A, Pacht A, Grinberg M, Reginashvili D, Henig C, **Barak M**. A new algorithm for the diagnosis of celiac disease. *Cell Mol Immunol*. 2011; 8: 146-9.
39. Froom P, **Barak M**. Lupus anticoagulant testing: analyzing fresh samples after a single centrifugation and after 6-8 h delay. *Clin Chem Lab Med*. 2011; 50: 367-70.
40. Froom P, **Barak M**. Cessation of dipstick urinalysis reflex testing and physician ordering behavior . *Am J Clin Pathol*. 2012; 137: 486-9.
41. Froom P, **Barak M**. Testing for lupus anticoagulants- fresh or frozen? *Clin Chem Lab Med*. 2012; 50:1607-9.
42. Froom P, Henig C, Zalman L, **Barak M**. Incidental findings of variant hemoglobin during hemoglobin A(1c) testing. *Am J Clin Pathol*. 2012; 138:425-8.
43. Henig C, Froom P, Saffuri-Elias E, **Barak M**. Hemoglobin Rambam has a constant retention time on the Tosoh G8 and interferes with the measurement of HbA(1c). *Clin Chem Lab Med*. 2012; 50:1477-8.
44. **Barak M**, Rozenberg O, Grinberg M, Reginashvili D, Kishinewsky M Henig C, Froom P. A novel cost effective algorithm for antinuclear antibody (ANA) testing in an outpatient setting. *Clin. Chem Lab Med*. 2013; 51:e163-5.
45. Golan D, Halhal B, Glass-Marmor L, Staun- Ram E, Rozenberg O, Lavi I, Dishon S, **Barak M**, Ish-Shalom S, Miller A. Vitamin D supplementation for patients with multiple sclerosis treated with interferon-beta: a randomized controlled trial assessing the effect on flu-like symptoms and immunomodulatory properties. *BMC Neurol*. 2013;13:60.
46. Rabizadeh E, Pickholtz I, **Barak M**, Froom P. Historical data decrease complete blood count reflex blood smear review rates without missing patients with acute leukaemia. *J Clin Pathol*. 2013; 66:692-4.
47. Golan D, Staun-Ram E, Glass-Marmor L, Lavi I, Rozenberg O, Dishon S, **Barak M**, Ish-Shalom S, Miller A. The influence of vitamin D supplementation on melatonin status in patients with multiple sclerosis. *Brain Behav Immun*. 2013; 32:180-5.
48. Wilson C, Ebling R, Henig C, Adler T, Nicolaevski R, **Barak M**, Cazabon J,

- Maisin D, Lepoutre T, Gruson D, Hughes RG, Parker AR. Significant, quantifiable differences exist between IgG subclass standards WHO67/97 and ERM-DA470k and can result in different interpretation of results. *Clin Biochem.* 2013; 46: 1751-5.
49. **Barak M**, Rozenberg O, Froom P, Grinberg M, Reginashvili D, Henig C, Pacht A, Lerner A. Challenging our serological algorithm for celiac disease (CD) diagnosis by the ESPGHAN guidelines. *Clin Chem Lab Med.* 2013; 51: e257-9.
51. Froom P, Diab A, **Barak M**. Automated evaluation of synovial and ascitic fluids with the Advia 2120 hematology analyzer. *Am J Clin Pathol.* 2013; 140:828-30.
52. Froom P, Saffuri-Elias E, Rozenberg O, **Barak M**. The association of serum antiphospholipid antibodies and dilute Russell's viper venom times. *J Clin Pathol.* 2014; 67:441-4.
53. Froom P, Isakov E, **Barak M**. Criteria for reflex peripheral smear review in infants. *Scand J Clin Lab Invest.* 2014; 74: 366-8.
54. Isakov E, Froom P, Henig C, **Barak M**. Anemia and estimated glomerular filtration rates. *Ann Clin Lab Sci.* 2014;44:419-24
55. Froom P, Saffuri-Elias E, Rozenberg O, **Barak M**. Triple positive antiphospholipid antibody profile in outpatients with tests for lupus anticoagulants. *Clin Chem Lab Med.* 2015; 53:53-6.
56. Rabizadeh E, Pickholtz I, **Barak M**, Isakov E, Zimra Y, Froom P. Acute leukemia detection rate by automated blood count parameters and peripheral smear review. *Int J Lab Hematol.* 2015; 37: 44-9.
57. Froom P, **Barak M**. Auto-validation of complete blood counts in an outpatient's regional laboratory. *Clin Chem Lab Med.* 2015; 53:275-9.
58. Froom P, Saffuri-Elias E, **Barak M**. Autovalidation rates in an outpatient coagulation laboratory. *Int J Lab Hematol.* 2015; 37: 680-5.
59. Shiran A, Remer E, Asmer I, Karkabi B, Zittan E, Cassel A, **Barak M**, Rozenberg O, Karkabi K, Flugelman MY. Association of vitamin B12 deficiency with homozygosity of the TT MTHFR C677T genotype, hyperhomocysteinemia, and endothelial cell dysfunction *Isr Med Assoc J.* 2015; 17:288-92.

60. Ken Dror S, Pavlotzky E, **Barak M**. Evaluation of the NanoCHIP[®] gastrointestinal panel (GIP) test for simultaneous detection of parasitic and bacterial enteric pathogens in fecal specimens. *PLoS One* 2016, Jul 22;11(7).
61. Susser S, Dietz J, Schlevogt B, **Barak M**, Piazzolla V, Howe A et al. Prevalence and clinical importance of Hepatitis C virus (HCV) genotype 2k/1b chimeras *J Hepatol.* 2017;67:680-686.
62. Bassal R, Shohat T, Kaufman Z, Mannasse B, Shinar E, Amichay D, **Barak M** et al. The seroprevalence of West Nile Virus in Israel: A nationwide cross sectional study. *PLoS One* 2017 Jun 16;12(6),1-10.

3. Case Reports

1. Potasman I, Seligman H, **Barak M**, Bassan HM. Compensated humoral immunity in chronic benign idiopathic neutropenia. *Lancet.* 1984; 1:1133-4.

4. Review papers

1. From P, Hermoni D, **Barak M**. Oral anticoagulation treatment-control, risks, benefits and informed consent. *Harefuah* 2003; 142:56-60, 77. Review. Hebrew.
2. From P, **Barak M**. Microscopic or occult hematuria, when reflex testing is not good laboratory practice. *J Nephrol.* 2010; 23:271-3.
3. Rozenberg O, Lerner A, Pacht A, Grinberg M, Reginashvili D, Henig C, **Barak M**. A Novel Algorithm for the Diagnosis of Celiac Disease and a comprehensive review of celiac disease diagnostics. *Clin Rev Allergy Immunol.* 2012; 42:331-41.
4. **Barak M**, Lerner A. Serological diagnosis of celiac *Israeli J Medical Media* 2012; 11-13.

5. Books and book chapters

1. Ulitzur S, Naveh A, **Barak M**. "Analytical use of luminous bacteria in veterinary and medical microbiology" in *Rapid Methods and Automation in Microbiology and Immunology*, Habermehl K.O. ed. Springer - Verlag, Berlin, Heidelberg, New York, Tokio, p.461-466, 1984.

2. **Barak M**, Gruener N. Neopterin and pteridines in cell mediated immune response. In Pteridines and related biogenic amines and folates Blau N, Curtius H Ch, Levine R, Yim J. editors; Hanrim Publishing Co. Seoul. P. 163-191, 1992.

7. Submitted papers

1. Froom P, Saffuri-Elias E, **Barak M**. Samples with clots- prothrombin time-to report or not to report- a preliminary study. Clin Chem Lab Med.
2. **Barak M**, Rozenberg O. False negative Toxoplasma IgM results due to manufacturer recommendation. Diagn Microbiol Infect Dis.

8. Other publications:

1. **Barak M**. Quality control in virology and microbiology in Abstracts of the Convocation of Experts on Laboratory Quality. Clin Chem Lab Med. 2012; 50: A303.
2. Agmon-Levin N, Damoiseaux J, Kallenberg C, Sack U, Witte T, Herold M, Bossuyt et al (**Barak M** –collaborator) International recommendations for the assessment of autoantibodies to cellular antigens referred to as anti-nuclear antibodies. Ann Rheum Dis 2014;73:17-23.