

## Assoc. Prof. ESRA BİRBEN

### Personal Information

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### Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Biyoloji/Moleküler Biyoloji, Turkey 1998 - 2005

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Biyoloji/Moleküler Biyoloji, Turkey 1995 - 1998

Undergraduate, Hacettepe University, Fen Fakültesi, Biyoloji, Turkey 1991 - 1995

### Foreign Languages

English, C1 Advanced

### Research Areas

Medicine, Health Sciences, Internal Medicine Sciences, Child Health and Diseases, Pediatric Immunology and Allergy

### Academic Titles / Tasks

Associate Professor, Hacettepe University, Fen Fakültesi, Biyoloji Bölümü, 2018 - Continues

Associate Professor, Hacettepe University, Tıp Fakültesi, Çocuk Sağlığı Enstitüsü, 2014 - Continues

Expert, Hacettepe University, Çocuk Sağlığı Enstitüsü, 2007 - Continues

### Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Determination of the effects of advanced glycation end products receptor polymorphisms and its activation on structural cell responses and inflammation in asthma**  
BİRBEN E., ŞAHİNER Ü. M., Kalaycı C. Ö.  
Turkish Journal of Medical Sciences, vol.53, no.1, pp.160-170, 2023 (SCI-Expanded)
- II. **The miRNA-24, miRNA-21 expressions and matrix metalloproteinase-7 level in exhaled breath condensate of children with primary spontaneous pneumothorax**  
SOYER T., BİRBEN E., Akıncı S. M., GÖLLÜ BAHADIR G., Türer Ö. B., UYSAL SOYER Ö., Çakmak M., ŞEKEREL B. E., Tanyel F. C.  
Journal of breath research, vol.17, no.1, 2022 (SCI-Expanded)
- III. **Comparison of miRNA expression in patients with seasonal and perennial allergic rhinitis and non-atopic asthma**  
Tuncer F., ŞAHİNER Ü. M., OCAK M., ÜNSAL H., UYSAL SOYER Ö., ŞEKEREL B. E., BİRBEN E.  
TURKISH JOURNAL OF PEDIATRICS, vol.64, no.5, pp.859-868, 2022 (SCI-Expanded)
- IV. **Editorial comments on: "Multi-ancestry genome-wide association study of asthma exacerbations"**

BİR BEN E., Kalayci O., Eigenmann P. A.

PEDIATRIC ALLERGY AND IMMUNOLOGY, vol.33, no.7, 2022 (SCI-Expanded)

- V. **Infantile atopic dermatitis: Serum vitamin D, zinc and TARC levels and their relationship with disease phenotype and severity**  
ESENBOĞA S., Sahiner N., Birben E., UYSAL SOYER Ö., ŞEKEREL B. E., ŞAHİNER Ü. M.  
ALLERGOLOGIA ET IMMUNOPATHOLOGIA, vol.49, no.3, pp.162-168, 2021 (SCI-Expanded)
- VI. **Co-sensitization to the fruit seeds and raw potato in children with cashew nut allergy**  
Cetinkaya P. G., BİR BEN E., KAHVECİ M., AKARSU A., Soyer Ö., ŞAHİNER Ü. M., ŞEKEREL B. E.  
ALLERGY, vol.75, no.9, pp.2366-2369, 2020 (SCI-Expanded)
- VII. **Cytokine genes show distinct polymorphism pattern in Hymenoptera venom allergy**  
SİN B. A., Tutkak H., BİR BEN E., Kose K., MISIRLIGİL Z.  
ALLERGY, vol.74, no.5, pp.1020-1022, 2019 (SCI-Expanded)
- VIII. **Genetic associations of the response to inhaled corticosteroids in asthma: a systematic review.**  
Keskin O., Farzan N., BİR BEN E., Akel H., Karaaslan C., Maitland-van der Zee A. H., Wechsler M. E., Vijverberg S. J., Kalayci O.  
Clinical and translational allergy, vol.9, pp.2, 2019 (SCI-Expanded)
- IX. **Oxidative stress in asthma: Part of the puzzle**  
ŞAHİNER Ü. M., BİR BEN E., Erzurum S., Sackesen C., Kalayci O.  
PEDIATRIC ALLERGY AND IMMUNOLOGY, vol.29, no.8, pp.789-800, 2018 (SCI-Expanded)
- X. **Doublesex and mab-3 related transcription factor 1 (DMRT1) is a sex-specific genetic determinant of childhood-onset asthma and is expressed in testis and macrophages**  
Schieck M., Schouten J. P., Michel S., Suttner K., Toncheva A. A., Gaertner V. D., Illig T., Lipinski S., Franke A., Klintschar M., et al.  
JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY, vol.138, no.2, pp.421-431, 2016 (SCI-Expanded)
- XI. **Genetic associations of the response to inhaled corticosteroids in children during an asthma exacerbation**  
Keskin O., Uluca U., BİR BEN E., Coskun Y., Ozkars M. Y., Keskin M., Kucukosmanoglu E., KALAYCI O.  
PEDIATRIC ALLERGY AND IMMUNOLOGY, vol.27, no.5, pp.507-513, 2016 (SCI-Expanded)
- XII. **Low indoleamine 2,3-dioxygenase activity in persistent food allergy in children**  
BUYUKTIRYAKI B., ŞAHİNER Ü. M., GİRGİN G., BİR BEN E., SOYER O. U., CAVKAYTAR O., ÇETİN C., YILMAZ E., YAVUZ S. T., KALAYCI O., et al.  
ALLERGY, vol.71, no.2, pp.258-266, 2016 (SCI-Expanded)
- XIII. **Polymorphisms of endotoxin pathway and endotoxin exposure: in vitro IgE synthesis and replication in a birth cohort**  
ŞAHİNER Ü. M., Semic-Jusufagic A., Curtin J. A., BİR BEN E., Belgrave D., SACKESEN C., Simpson A., YAVUZ T. S., AKDIS C. A., Custovic A., et al.  
ALLERGY, vol.69, no.12, pp.1648-1658, 2014 (SCI-Expanded)
- XIV. **The Genetic Variants of Thymic Stromal Lymphopoietin Protein in Children with Asthma and Allergic Rhinitis**  
Birben E., Sahiner Ü. M., Karaaslan C., Yavuz T., Cosgun E., Kalayci O., Sackesen C.  
INTERNATIONAL ARCHIVES OF ALLERGY AND IMMUNOLOGY, vol.163, no.3, pp.185-192, 2014 (SCI-Expanded)
- XV. **Pepsin levels and oxidative stress markers in exhaled breath condensate of patients with gastroesophageal reflux disease**  
Soyer T., Soyer O. U., BİR BEN E., Kisa U., KALAYCI O., Cakmak M.  
JOURNAL OF PEDIATRIC SURGERY, vol.48, no.11, pp.2247-2250, 2013 (SCI-Expanded)
- XVI. **The role of CD14 gene promoter polymorphism in tuberculosis susceptibility**  
Ayaslioglu E., Kalpaklioglu F., Kavut A. B., ERTÜRK A., ÇAPAN N., BİR BEN E.  
JOURNAL OF MICROBIOLOGY IMMUNOLOGY AND INFECTION, vol.46, no.3, pp.158-163, 2013 (SCI-Expanded)
- XVII. **Factors that predict the clinical reactivity and tolerance in children with cow's milk allergy**  
YAVUZ S., BÜYÜKTİRYAKI B., ŞAHİNER Ü. M., BİR BEN E., TUNCER A., YAKARIŞIK S., KARABULUT E., KALAYCI O., Sackesen C.

- ANNALS OF ALLERGY ASTHMA & IMMUNOLOGY, vol.110, no.4, pp.284-289, 2013 (SCI-Expanded)
- XVIII. **The role of SCCA1 in asthma related physiological events in the airway epithelium and the effect of promoter variants on asthma and gene function**  
Karaaslan C., BİR BEN E., KESKİN O., Sahiner Ü. M., Sackesen C., KALAYCI O.  
RESPIRATORY MEDICINE, vol.107, no.3, pp.368-379, 2013 (SCI-Expanded)
- XIX. **The role of SPINK5 in asthma related physiological events in the airway epithelium**  
BİR BEN E., Sackesen C., TURGUTOĞLU N., Kalayci O.  
RESPIRATORY MEDICINE, vol.106, no.3, pp.349-355, 2012 (SCI-Expanded)
- XX. **Association Between Tuberculosis and Atopy: Role of the CD14-159C/T Polymorphism**  
Kavut A. B., Kalpaklioglu F., Birben E., Ayaslioglu E.  
JOURNAL OF INVESTIGATIONAL ALLERGOLOGY AND CLINICAL IMMUNOLOGY, vol.22, no.3, pp.201-207, 2012 (SCI-Expanded)
- XXI. **The effects of an insertion in the 5' UTR of the AMCase on gene expression and pulmonary functions**  
BİR BEN E., SAÇKESEN C., KAZANİ S., Tincer G., KARAASLAN İ. Ç., DURGUNSU B., GÜRSEL İ., Wechsler M. E., ISRAEL E., KALAYCI Ö.  
RESPIRATORY MEDICINE, vol.105, no.8, pp.1160-1169, 2011 (SCI-Expanded)
- XXII. **The effect of CD14 C159T polymorphism on in vitro IgE synthesis and cytokine production by PBMC from children with asthma**  
Sackesen C., BİR BEN E., Soyer O. U., ŞAHİNER Ü. M., Yavuz T. S., CİVELEK E., KARABULUT E., AKDİŞ M., Akdis C. A., KALAYCI Ö.  
ALLERGY, vol.66, no.1, pp.48-57, 2011 (SCI-Expanded)
- XXIII. **Oxidative stress in asthma**  
Sahiner Ü. M., Birben E., Erzurum S., Sackesen C., Kalayci O.  
World Allergy Organization Journal, vol.4, no.10, pp.151-158, 2011 (SCI-Expanded)
- XXIV. **Antiangiogenic response after 70% hepatectomy and its relationship with hepatic regeneration and angiogenesis in rats**  
DOĞRUL A. B., Colakoglu T., KÖSEMEHMETOĞLU K., BİR BEN E., Yaman E., GEDİKOĞLU G., ABBASOĞLU O.  
SURGERY, vol.147, no.2, pp.288-294, 2010 (SCI-Expanded)
- XXV. **Cellular Allergen Stimulation Test with Acetylsalicylic Acid-Lysine Is Not a Useful Test to Discriminate between Asthmatic Patients with and without Acetylsalicylic Acid Sensitivity**  
BAVBEK S., Dursun A. B., BİR BEN E., Kalayci O., Misirligil Z.  
INTERNATIONAL ARCHIVES OF ALLERGY AND IMMUNOLOGY, vol.149, no.1, pp.58-64, 2009 (SCI-Expanded)
- XXVI. **Oxidative stress and its determinants in the airways of children with asthma**  
DUT R., Dizdar E. A., BİR BEN E., Sackesen C., Soyer O. U., Besler T., KALAYCI Ö.  
ALLERGY, vol.63, no.12, pp.1605-1609, 2008 (SCI-Expanded)
- XXVII. **Effects of pentoxifylline on TNF-alpha production by peripheral blood mononuclear cells in patients with nonalcoholic steatohepatitis**  
Duman D. G., Ozdemir F., Birben E., KESKİN O., Eksioğlu-Demiralp E., ÇELİKEL C., KALAYCI O., KALAYCI C.  
DIGESTIVE DISEASES AND SCIENCES, vol.52, no.10, pp.2520-2524, 2007 (SCI-Expanded)
- XXVIII. **Oxidative stress and genetic and epidemiologic determinants of oxidant injury in childhood asthma.**  
Ercan H., Birben E., Dizdar E. A., KESKİN O., Karaaslan C., Soyer O. U., DUT R., Sackesen C., Besler T., KALAYCI O.  
The Journal of allergy and clinical immunology, vol.118, no.5, pp.1097-104, 2006 (SCI-Expanded)
- XXIX. **The effect of CD14-C159T genotypes on the cytokine response to endotoxin by peripheral blood mononuclear cells from asthmatic children**  
Keskin O., Birben E., Sackesen C., Soyer O. U., Alyamac E., Karaaslan C., Tokol N., Ercan H., Kalayci O.  
ANNALS OF ALLERGY ASTHMA & IMMUNOLOGY, vol.97, no.3, pp.321-328, 2006 (SCI-Expanded)
- XXX. **ALOX5 promoter genotype, asthma severity and LTC4 production by eosinophils**  
KALAYCI Ö., Birben E., Sackesen C., KESKİN Ö., TAHAN F., WECHSLER M. E., Civelek E., Soyer O., Adalioglu G., TUNCER A., et al.  
ALLERGY, vol.61, no.1, pp.97-103, 2006 (SCI-Expanded)

- XXXI. **The effect of polymorphisms at the CD14 promoter and the TLR4 gene on asthma phenotypes in Turkish children with asthma.**  
Sackesen C., Karaaslan C., KESKİN Ö., TOKOL N., TAHAN F., Civelek E., Soyer O., Adalioglu G., TUNCER A., Birben E., et al.  
Allergy, vol.60, no.12, pp.1485-92, 2005 (SCI-Expanded)
- XXXII. **Role of prostanoid DP receptor variants in susceptibility to asthma**  
OGUMA T., PALMER L. J., Birben E., SONNA L. A., ASANO K., LİLLY C.  
NEW ENGLAND JOURNAL OF MEDICINE, vol.351, no.17, pp.1752-1763, 2004 (SCI-Expanded)
- XXXIII. **Role of 90K protein in asthma and TH2-type cytokine expression**  
KALAYCI O., Birben E., TİNARİ N., OGUMA T., IACOBELLİ S., Lilly C. M.  
Annals of Allergy, Asthma and Immunology, vol.93, no.5, pp.485-492, 2004 (SCI-Expanded)
- XXXIV. **Monocyte chemoattractant protein-4 core promoter genetic variants influence on YY-1 affinity and plasma levels**  
KALAYCI Ö., BİR BEN E., WU L., OGUMA T., Gravesande K., SUBRAMANIAM V., Sheldon H., SILVERMAN E. S., LİLLY C.  
AMERICAN JOURNAL OF RESPIRATORY CELL AND MOLECULAR BIOLOGY, vol.29, no.6, pp.750-756, 2003 (SCI-Expanded)
- XXXV. **Identification of an inframe deletion and a missense mutation in the factor XIII A gene in two Turkish patients**  
Birben E., ÖNER C., ÖNER R., ALTAY Ç., Gurgey A.  
EUROPEAN JOURNAL OF HAEMATOLOGY, vol.71, no.1, pp.39-43, 2003 (SCI-Expanded)
- XXXVI. **Mutations in coagulation factor XIII A gene in three Turkish patients: two novel mutations and a known insertion**  
Birben E., ÖNER R., ÖNER C., Gumruk F., ALTAY Ç., Gurgey A.  
BRITISH JOURNAL OF HAEMATOLOGY, vol.118, no.1, pp.278-281, 2002 (SCI-Expanded)
- XXXVII. **A safer and relatively shorter method for Southern blot hybridization analysis**  
MERGEN H., ACAR C., BİR BEN E., ÖNER R., ÖNER C.  
Journal of Biochemical and Biophysical Methods, vol.44, pp.73-76, 2000 (SCI-Expanded)
- XXXVIII. **Molecular analysis of Turkish beta-thalassemia heterozygotes with normal Hb A(2) levels**  
Oner R., Birben E., Acar C., Oner C., Kara A., Gumruk F., Gurgey A., Altay C.  
HEMOGLOBIN, vol.24, no.3, pp.195-201, 2000 (SCI-Expanded)
- XXXIX. **Molecular, genetic and epidemiologic studies on selective complete C1q deficiency in Turkey**  
BERKEL A. I., BİR BEN E., ÖNER C., ÖNER R., LOOS M., PETRY F.  
Immunobiology, vol.201, pp.347-355, 2000 (SCI-Expanded)
- XL. **Hb H disease with homozygosity for red cell G6PD deficiency in a Turkish female**  
Oner C., Oner R., Birben E., Balkan H., Gumruk F., Gurgey A., Altay C.  
HEMOGLOBIN, vol.22, no.2, pp.157-160, 1998 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Astımda Genetik Faktörler ve Gen-Çevre Etkileşimi**  
KARAASLAN İ. Ç., BİR BEN E., KALAYCI Ö.  
Klinik Tıp Pediatri, 2017 (Peer-Reviewed Journal)
- II. **Oxidative Stress and Antioxidant Defense**  
BİR BEN E., ŞAHİN ER Ü. M., SAÇKESEN C., Erzurum S., Kalayci O.  
WORLD ALLERGY ORGANIZATION JOURNAL, vol.5, pp.9-19, 2012 (ESCI)

## Books & Book Chapters

- I. **Bileşene Dayalı Tanı**

BİR BEN E.

in: A dan Z ye İnek Sütü Protein Allerjisi, Bülent Şekerel, Editor, Ankamat Matbaacılık, 2016

## II. ALLERJİK HASTALIKLARDA GENETİK FAKTÖRLER VE GEN-ÇEVRE ETKİLEŞİMİ

BİR BEN E., KARAASLAN İ. Ç., KALAYCI Ö.

in: ÇOCUKLUK ÇAĞINDA ALLERJİ ASTİM İMMÜNOLJİ, BÜLENT ENİS ŞEKEREL, Editor, ADA BASIN YAYIN, pp.265-275, 2015

## Refereed Congress / Symposium Publications in Proceedings

### I. The role of indoleamine 2,3-dioxygenase (IDO) gene polymorphisms and tryptophan/kynurenine pathway in food allergic and tolerant children

Buyuktiryaki B., ŞAHİNER Ü. M., GİRGİN G., Cavkaytar O., YILMAZ A., YAVUZ S., ÇETİN C., BİR BEN E., BAYDAR T., TUNCER A., et al.

World Allergy and Asthma Congress of the European-Academy-of-Allergy-and-Clinical-Immunology and World-Allergy-Organization, Milan, Italy, 22 - 26 June 2013, vol.68, pp.7-8

## Supported Projects

BİR BEN E., ŞAHİNER Ü. M., Erboğa H., ŞEKEREL B. E., UYSAL SOYER Ö., ÜNSAL H., Project Supported by Higher Education Institutions, Besin Alerjisi Patogenezinde Kısa ve Uzun Kodlamayan RNAların Rolü, 2020 - 2022

BİR BEN E., UYSAL SOYER Ö., ŞEKEREL B. E., ŞAHİNER Ü. M., KOŞUKCU C., Project Supported by Higher Education Institutions, Hereditör Anjioödem Tip III Tanılı Hastalarda Yeni Aday Genlerin Belirlenmesi, 2017 - 2022

BİR BEN E., BÜYÜKTİRYAKI A. B., ŞEKEREL B. E., Project Supported by Higher Education Institutions, MEVSİMSEL VE PERENNİAL ALLERJİK RİNİTLİ VE ASTİMLİ HASTALARDA MİRNA EKSPRESYONUNUN KARŞILAŞTIRMALI OLARAK İNCELENMESİ, 2018 - 2020

SOYER T., ÖZÇELİK H. U., BİR BEN E., TANYEL F. C., DOĞRU ERSÖZ D., YALÇIN E. E., UYSAL SOYER Ö., Project Supported by Higher Education Institutions, Özofagus Atrezisi ve trakeoözofageal fistüllü olgularda nefes havasında oksidatif hasar belirteçleri ve solunumsal sorunlarla ilişkisinin incelenmesi, 2019 - 2019

BİR BEN E., Project Supported by Higher Education Institutions, Allerjen kaynaklı proteazların astımlı ve sağlıklı bireylerden elde olunan havayolu epitel hücreleri üzerine olan etki mekanizmaları, 2017 - 2017

GÜR ÇETİNKAYA P., BİR BEN E., ŞEKEREL B. E., ŞAHİNER Ü. M., KARAASLAN İ. Ç., Project Supported by Higher Education Institutions, Kuruyemiş allerjisi olan çocuklarda doğal seyir prognoz ve klinik şiddeti etkileyen faktörler ve kuruyemişler arasındaki çapraz reaksiyonlar, 2016 - 2017

SÖNMEZ H. E., ÖZEN S., KİPER E. N., ÖZÇELİK H. U., BİR BEN E., EMİRALİOĞLU N., TUĞCU G. D., BATU E. D., Project Supported by Higher Education Institutions, Çocukluk Çağı Romatizmal Hastalıklarında Akciğer Bulgularının İncelenmesi, 2016 - 2017

BİR BEN E., Project Supported by Higher Education Institutions, RAGE Receptor of AGE Geni Promotorunda Yer Alan 374 TA Değişiminin Astımdaki Enflamasyon Üzerine Etkilerinin Belirlenmesi, 2016 - 2017

DOĞAN C., ÖZTURHAN A. C., ŞAHİNER Ü. M., BİR BEN E., UYSAL SOYER Ö., Project Supported by Higher Education Institutions, Phleum pratense L Poleninin Populus L Salix L Chenopodium L Artemisia L Ve Plantago L Polenleri İle Arasındaki Allerjik Çapraz Reaksiyonlarının Belirlenmesi Ve Klinik Bulgularla Korelasyonu, 2015 - 2016

KARAASLAN İ. Ç., BİR BEN E., Project Supported by Higher Education Institutions, Astımlı Ve Sağlıklı Primer Bronş Epitel Hücrelerinde Der P1 Stimülasyonunun Proteaz İnhibitör Profili Üzerine Etkisinin Belirlenmesi, 2015 - 2016

BİR BEN E., Project Supported by Higher Education Institutions, Allerjen Kaynaklı Proteazların Astımlı Hastalar ve Sağlıklı Bireylerden Elde Olunan Hava Yolu Epiteline Olan Etkilerinin ve Mekanizmaların Karşılaştırmalı İncelenmesi, 2015 - 2016

BİR BEN E., TUBITAK Project, SKuomaz hücre karsinoma antijeni SCCA nın astım patogenezindeki rolünün belirlenmesi, 2005 - 2009

## **Metrics**

Publication: 63

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Citation (Scopus): 4072

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H-Index (Scopus): 18