

Serkan İsmail Göktuna, Dr. rer. Nat. (PhD)

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Date of Birth:	27.04.1980	Telephone:	+903122902418
Place of Birth:	Ankara, Turkey	Fax:	+903122665097
Marital Status:	Married	E-mail:	serkan.goktuna@bilkent.edu.tr

Research Experience

1) 2015-present Bilkent University, Ankara, Turkey

Principal Investigator: Identification of novel signaling pathways in tumor immunology

2) 2010-2015 GIGA (Interdisciplinary Cluster of Applied Genoproteomics) University of Liège (ULg), Liège, Belgium

Postdoctoral Research: The role of IKKepsilon in colorectal tumorigenesis

3) 2005-2010 Technical University of Munich (Technische Universität München, TUM), Munich, Germany

PhD Thesis: The role of IKKalpha in sporadic and familial colorectal tumorigenesis

4) 2003-2005 Sabancı University, Istanbul, Turkey

MS Thesis: MEKK1 and MEKK3 involvement in TNF-alpha and IL-1beta signaling in cervical carcinoma HeLa cells

5) 2003 Middle East Technical University (METU), Ankara, Turkey

Special Project: Cloning and expression of aspartic protease gene from thermoacidophilic bacteria

6) 2002 Max-Delbrück Center for Molecular Medicine, Berlin, Germany

Summer Practice: SNP analysis of KRT9 gene in palmoplantar hyperkeratosis patients

Education

1) Technical University of Munich (TUM), Human Biology, Doktor rer. Nat. (PhD) Munich, Germany 2005-2010

2) Sabancı University, Biological Sciences and Bioengineering (MS), Istanbul, Turkey 2003-2005

3) Middle East Technical University (METU), Molecular Biology and Genetics (BS), Ankara, Turkey 1998-2003

4) Ankara Bahçelievler Deneme Lisesi (High School), Natural Sciences, Ankara Turkey 1994-1997

Honors

2016-2018	TÜBİTAK 2232 Career Integration Fellowship
2013-2014	Fonds Léon Fredericq Postdoctoral Research Grant
2012-2015	WELBIO (Walloon Excellence in Life Sciences and Biotechnology) Postdoctoral Fellowship
2010-2012	University of Liège Postdoctoral Fellowships
2010	Doktor rerum Naturalium (PhD) from TUM with “magna cum laude”
2007-2009	TÜBİTAK Doctoral Scholarship for Foreign Countries (BİDEB 2213)
2005-2007	TUM Doctoral Fellowship
2005	Master of Science (MSc) from Sabancı University with High Honor Degree
2003-2005	Sabancı University Full Graduate Scholarship and Assistantship
2003	Bachelor of Science (BSc) from METU with Honor Degree
1998-2003	METU Full Basic Sciences Scholarship
1998-2003	TÜBİTAK Basic Sciences Scholarship

Publications

- 1) Göktuna SI**, Shostak K, Chau TL, Heukamp L, Hennuy B, Duong HQ, Ladang A, Close P, Klevernic I, Olivier F, Florin A, Ehx G, Baron F, Vandereyken M, Rahmouni S, Vereecke L, van Loo G, Büttner R, Greten FR, Chariot A. The pro-survival IKK-related kinase IKK ϵ integrates LPS and IL-17A signaling cascades to promote Wnt-dependent tumor development in the intestine. *Cancer Research*. 2016; 76 (9): 2587-99. doi: 10.1158/0008-5472.CAN-15-1473.
- 2) Ladang A**, Rapino F, Heukamp L, Tharun L, Shostak K, Hermand D, Delaunay S, Klevernic I, Jiang Z, Jacques N, Damart D, Migeot V, Florin A, **Göktuna SI**, Malgrande B, Sansom O, Nguyen L, Büttner R, Close P, Chariot A. Elp3 drives Wnt-dependent tumor initiation and regeneration in the intestine. *Journal of Experimental Medicine (JEM)*. 2015; 212(12):2057-75. doi: 10.1084/jem.20142288.
- 3) Chau TL**, **Göktuna SI**, Rammal A, Casanova T, Duong HQ, Gatot J-S, Close P, Dejardin E, Desmecht D, Shostak K, Chariot A. A role for APPL1 in TLR3/4-dependent TBK1 and IKK ϵ activations in macrophages. *Journal of Immunology*. 2015; (194):3970-3983. doi: 10.4049/jimmunol.1401614.
- 4) Shostak K**, Zhang X, Hubert P, **Göktuna SI**, Jiang Z, Klevernic I, Hildebrand J, Roncarati P, Hennuy B, Ladang A, Somja J, Gothot A, Close P, Delvenne P, Chariot A. NF- κ B-induced KIAA1199 promotes survival through EGFR signaling. *Nature Communications*. 2014; 5:5232. doi: 10.1038/ncomms6232.
- 5) Göktuna SI**, Canli Ö, Bollrath J, Fingerle AA, Horst D, Diamanti M, Pallangyo C, Bennecke M, Nebelsiek T, Mankan AK, Lang R, Artis D, Hu Y, Patzelt T, Ruland J, Kirchner T, Taketo MM, Chariot A, Arkan MC, Greten FR. IKK α promotes intestinal tumorigenesis by limiting recruitment of M1-like polarized myeloid cells. *Cell Reports*. 2014; 7(6):1914-25. doi: 10.1016/j.celrep.2014.05.006.
- 6) Shostak K**, Patrascu F, **Göktuna SI**, Close P, Borgs L, Nguyen L, Olivier F, Rammal A, Brinkhaus H,

Bentires-Alj M, Marine JC, Chariot A. MDM2 restrains estrogen-mediated AKT activation by promoting TBK1-dependent HPIP degradation. *Cell Death & Differentiation*. 2014; (5):811-24. doi: 10.1038/cdd.2014.2.

7) Stellzig J, Chariot A, Shostak K, **Ismail Göktuna S**, Renner F, Acker T, Pagenstecher A, Schmitz ML. Deregulated expression of TANK in glioblastomas triggers pro-tumorigenic ERK and AKT signaling pathways. *Oncogenesis*. 2013; e79. doi: 10.1038/oncsis.2013.42.

8) Schwitalla S, Fingerle AA, Cammareri P, Nebelsiek T, **Göktuna SI**, Ziegler PK, Canli O, Heijmans J, Huels DJ, Moreaux G, Rupec RA, Gerhard M, Schmid RM, Barker N, Clevers H, Lang R, Neumann J, Kirchner T, Taketo MM, van den Brink GR, Sansom OJ, Arkan MC, Greten FR. Intestinal Tumorigenesis Initiated by Dedifferentiation and Acquisition of Stem-Cell-like Properties. *Cell*. 2013; 152 (1-2): 25-38.

9) Greten FR, Arkan MC, Bollrath J, Hsu LC, Goode J, Miething C, **Göktuna SI**, Neuenhahn M, Fierer J, Paxian S, Van Rooijen N, Xu Y, O'Cain T, Jaffee BB, Busch DH, Duyster J, Schmid RM, Eckmann L, Karin M. NF-kappaB is a negative regulator of IL-1beta secretion as revealed by genetic and pharmacological inhibition of IKKbeta. *Cell*. 2007; 130(5):918-31.

10) Arslan MA, **Göktuna SI**, Basaga H. Signaling pathways as drug targets in cancer. *Advances in Molecular Medicine*. 2005; 1(2): 69-74. (Non-SCI Review)

Conference Proceedings

1) **Göktuna SI**, Canli Ö, Bollrath J, Fingerle AA, Horst D, Diamanti M, Pallangyo C, Bennecke M, Nebelsiek T, Mankan AK, Lang R, Artis D, Hu Y, Patzelt T, Ruland J, Kirchner T, Taketo MM, Chariot A, Arkan MC, Greten FR. IKK α promotes intestinal tumorigenesis by limiting recruitment of M1-like polarized myeloid cells. *FEBS Journal*. 2014; 281(Special Issue, Supplement 1):130-1.

2) Fingerle AA, **Göktuna SI**, Taketo MM, Janssen KP, Schmid RM, Greten FR. Die Bedeutung des klassischen NF- κ B-Signalwegs für Tumorentstehung, Progression und Chemosensitivität in einem in vivo Modell für das sporadische Kolonkarzinom. *Zeitschrift für Gastroenterologie*. 2007; 45 – PP04, DOI: 10.1055/s-2007-988113.

Poster Presentations

1) **Göktuna SI**, Shostak K, Chau TL, Heukamp L, Hennuy B, Duong HQ, Ladang A, Close P, Klevernic I, Olivier F, Florin A, Ehx G, Baron F, Vandereyken M, Rahmouni S, Vereecke L, van Loo G, Büttner R, Greten FR, Chariot A. IKBKE maintains a pro-inflammatory loop during intestinal tumorigenesis. The ISREC-SCCL Symposium 2016: Horizons of Cancer Biology and Therapy. Lausanne, September 7-10, 2016.

- 2) **Göktuna SI**, Shostak K, Chau TL, Heukamp L, Hennuy B, Duong HQ, Ladang A, Close P, Klevernic I, Olivier F, Florin A, Ehx G, Baron F, Vandereyken M, Rahmouni S, Vereecke L, van Loo G, Büttner R, Greten FR, Chariot A. IKK ϵ /IKBKE integrates LPS and IL-17A signaling cascades to establish an inflammatory microenvironment in intestinal tumors. EACR24: 24th Biennial Conference of European Association for Cancer Research. Manchester. July 9-12, 2016 (*Poster in the spotlight*).
- 3) **Göktuna SI**, Chau TL, Heukamp L, Florin A, Ladang A, Close P, Olivier F, Büttner R, Ehx G, Baron F, Vandereyken M, Rahmouni S, Hennuy B, Shostak K, Greten FR, Chariot A. IKK ϵ promotes intestinal tumorigenesis by establishing a pro-inflammatory microenvironment. GIGA-Day on Current Advances in Medical Genetics and Genomics, Liège, January 27, 2015.
- 4) **Göktuna SI**, Canli Ö, Bollrath J, Fingerle AA, Horst D, Diamanti M, Pallangyo C, Bennecke M, Nebelsiek T, Mankan AK, Lang R, Artis D, Hu Y, Patzelt T, Ruland J, Kirchner T, Taketo MM, Chariot A, Arkan MC, Greten FR. IKK α promotes intestinal tumorigenesis by limiting recruitment of M1-like polarized myeloid cells. FEBS-EMBO Meeting, Paris August 30-September 4, 2014.
- 5) Shostak K, Zhang X, Hubert P, **Göktuna SI**, Hildebrand J, Jiang Z, Klevernic I, Roncarati P, Hennuy B, Ladang A, Somja J, Gothot A, Close P, Delvenne P, Chariot A. NF- κ B-induced KIAA1199/PINB promotes survival through EGFR signaling. EMBO Conference on Cellular Signaling and Cancer Therapy, Dubrovnik May 24-27, 2014.
- 6) Shostak K, Patrascu F, **Göktuna SI**, Close P, Borgs L, Nguyen L, Olivier F, Rammal A, Brinkhaus H, Bentires-Alj M, Marine JC, Chariot A. TBK1 promotes phospho-dependent degradation of HPIP by MDM2 to control AKT activation by estrogens. EMBO Meeting, Amsterdam September 21-24, 2013.
- 7) Ladang A, Heukamp L, Jiang Z, **Göktuna SI**, Gillard M, Malgrange B, Nguyen L, Sansom O, Büttner R, Close P, Chariot A. Tumour initiation in the intestine requires the Elongator acetylase complex. EMBO Meeting, Amsterdam, September 21-24, 2013.
- 8) Fingerle AA, **Göktuna SI**, Taketo MM, Janssen KP, Schmid RM, Greten FR. Die Bedeutung des klassischen NF- κ B-Signalwegs für Tumorentstehung, Progression und Chemosensitivität in einem in vivo Modell für das sporadische Kolonkarzinom. DGVS Gastroenterology Meeting, Bochum, September 12-15, 2007.

Invited Talks

- 1) IKBKE maintains a pro-inflammatory loop for intestinal tumor development, MIMIC-III, 3rd International Molecular Immunology & Immunogenetics Congress, Antalya, April 29, 2016.
- 2) Inflammatory pathways in colon cancer, Bilgent Genetics Society Molecular Medicine and Immunology Days, Bilkent University, Ankara, April 9, 2016.
- 3) IKK ϵ promotes intestinal tumorigenesis by establishing a pro-inflammatory microenvironment. 4th International Congress of the Molecular Biology Association of Turkey, METU, Ankara, November 27, 2015.

- 4) IKK ϵ integrates LPS and IL-17A signaling cascades to promote tumor development in the intestine. Immunology Frontier Research Center (IFReC) of Osaka University, Osaka, July 9, 2015.
- 5) New insights into Wnt-driven tumor development in the intestine. GIGA-Cancer, Liège, November 6, 2014.
- 6) The IKK-related kinase IKK ϵ limits Wnt signalling but promotes tumor development in the intestine. BSCDB-BSBMB Joint Meeting, Antwerp, November 7, 2014.
- 7) IKKs and IKK-related Kinases in Inflammation and Cancer, Bilkent University Department of Molecular Biology and Genetics, Ankara, June 19, 2014.
- 8) The role of IKK α in sporadic and familial colorectal tumorigenesis, Institute of Molecular Genetics of the ASCR, Prague, April 7, 2009.

Conference/Workshop Attendances

- 1) ISREC-SCCL 2016, Symposia in Horizons of Cancer Biology and Therapy, SCCL, Lausanne, Switzerland, September 7-10, 2016.
- 2) EACR 2016, 24th Biennial Congress of the European Association for Cancer Research, Manchester, United Kingdom, July 9-12, 2016.
- 3) MIMIC-III, 3rd International Molecular Immunology & Immunogenetics Congress, Antalya, Turkey, April 27-30, 2016.
- 4) Bilgent Genetics Society Molecular Medicine and Immunology Days, Bilkent University, Ankara, Turkey, April 9-10, 2016.
- 5) 4th International Congress of the Molecular Biology Association of Turkey, METU, Ankara, Turkey, November 27-29, 2015.
- 6) Turkey-Singapore Joint Workshop on Molecular Biology, Bilkent University, Ankara, Turkey, May 25-26, 2015.
- 7) GIGA-Day on Current Advances in Medical Genetics and Genomics, GIGA, Liège, Belgium, January 27, 2015.
- 8) BSCDB-BSBMB Joint Autumn Meeting, Antwerp, Belgium, November 6-7, 2014.
- 9) Symposium on Cellular Crosstalk in the Tumor Microenvironment, GSH Institute of Tumor Biology and Experimental Therapy, Frankfurt, Germany, October 16-17, 2014.
- 10) FEBS-EMBO 50th Year Anniversary Meeting, Paris, France, August 30-September 4, 2014.
- 11) BSCDB Autumn Meeting, Liège, Belgium, October 18-19, 2013.
- 12) GIGA-Day, GIGA, Liège, Belgium, January 28, 2013.
- 13) GIGA-Cancer Day, GIGA, Liège, Belgium, June 22, 2012.
- 14) 19th DMBR Workshop on Disease Models and Cancer, IRC-VIB, University of Ghent, Ghent, Belgium, May 27 2012.
- 15) GIGA-Day, GIGA, Liège, Belgium, January 31, 2011.

Memberships

- 1) BSCDB, Belgian Society of Cellular and Developmental Biology
- 2) EACR, European Association for Cancer Research
- 3) MBD, Turkish Molecular Biology Association
- 4) MOKAD, Molecular Cancer Research Association