## PERSONAL INFORMATIONS

Nationality: Turkish Date of birth: 07/24/1987

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## EDUCATION AND TRAINING

Postdoctoral

[2024-Present] Postdoctoral Associate with Dr. Ekta Khurana, Weill Cornell Medicine (WCM)/ USA

[2023-2024] Postdoctoral Fellow with Dr. Utthara Nayar, Bloomberg School of Public Health, Department of Biochemistry and Molecular Biology, Johns Hopkins University/ USA

[2020-2023] Postdoctoral Fellow with Dr. Laszlo Tora, Institute of Genetics and Molecular and Cellular Biology (IGBMC)/ France

Doctoral/graduate

[2019] Doctor of Philosophy, PhD, in Pharmaceutical Biotechnology, Institute of Health Sciences, Marmara University/Turkey

[2015] Master of Science with thesis, ScM, in Pharmaceutical Biotechnology, Graduate School of Health Sciences, Ege University/Turkey

Undergraduate

[2012] Bachelor of Science, BS, Biochemistry, Faculty of Science, Ege University/Turkey

## PROFESSIONAL EXPERIENCE

[2018-2021] Research Assistant (faculty position to teach undergraduate laboratory courses), Faculty of Pharmacy, Sivas Cumhuriyet University/ Turkey

[2014-2018] Research Assistant (faculty position to teach undergraduate laboratory courses), Graduate School of Health Sciences, Ege University/Turkey

## PUBLICATIONS

1- The intersection of the HER2-low subtype with endocrine resistance: the role of interconnected signaling pathways. G Yayli, A Tokofsky, U Nayar, Frontiers in Oncology, 2024. Submitted.

2- The ATAC and SAGA co-activator complexes utilize co-translational assemble, but their cellular localization properties and functions are distinct. G Yayli, A Bernardini, PK Mendoza Sanchez, E Scheer, M Damilot, K Essabri, B Morlet, L Negroni, S Vincent, MHT Timmers and L Tora, Cell Reports, 2023. DOI: 10.1016/j.celrep.2023.113099

3- Hierarchical TAF1-dependent co-translational assembly of the basal transcription factor TFIID. A Bernardini, P Mukherjee, E Scheer, I Kamenova, S Antonova, PK Mendoza Sanchez, G Yayli, B Morlet, HTM Timmers, L Tora, Nature Structural Biology, 2023. DOI: 10.1038/s41594-023-01026-3

4- ATAC and SAGA histone acetyltransferase modules facilitate transcription factor binding to nucleosomes in an acetylation independent manner. K Chesnutt, G Yayli, C Toelzer, K Cox, G Gautam, I Berger, L Tora, MG Poirier, *bioRxiv*, 2023. DOI: 10.1101/2023.10.27.564358

5- DNA repair complex licenses acetylation of H2A. Z. 1 by KAT2A during transcription. M Semer, B Bidon, A Larnicol, G Caliskan (Yayli), P Catez, JM Egly, F Coin, Nature Chemical Biology, 2019. DOI: 10.1038/s41589-019-0354-y

6- Functional interplay between TFIIH and KAT2A regulates higher-order chromatin structure and class II gene expression. J Sandoz, Z Nagy, P Catez, G Caliskan (Yayli), S Geny, JB Renaud, JP Concordet, A Poterszman, L Tora, JM Egly, N Le May, F Coin, Nature communications, 2019. DOI: 10.1038/s41467-019-09270-2

7- Che1/AATF interacts with subunits of the histone acetyltransferase core module of SAGA complexes. G Caliskan (Yayli), IC Baris, F Ayaydin, MJ Dobson, M Senarisoy, IM Boros, Z Topcu, S Zencir, PLoS One, 2017. DOI: 10.1371/journal.pone.0189193

## CONFERENCES AND SEMINARS

1- Transcriptional rewiring by receptor tyrosine kinases (RTKs) in metastatic breast cancer

[Baltimore, USA 2024] Keynote Abstract Talk – Johns Hopkins 17th Annual Breast Cancer Research Retreat

2- TAF1-dependent co-translational assembly of the basal transcription factor TFIID

[Heidelberg, GERMANY, 2022] Poster presentation- EMBL Conference 'Transcription and chromatin'

3- Deciphering the functional and structural role of TAF1 within basal transcription factor TFIID

[Heidelberg, GERMANY, 2022] Poster presentation- EMBL Conference 'Transcription and chromatin'

4- Evidence for an acetylation-independent function of the SAGA and ATAC human acetyltransferase modules

[CSHL, USA, 2022] Poster presentation- Cold Spring Harbor Laboratory meeting 'Epigenetics & Chromatin'

5- Molecular interactions of ADA2 proteins, as the components of histone acetyl transferase complexes

[Sant Feliu de Guixols, Girona, SPAIN, 2014] Poster presentation- EMBO Conference 'Gene transcription in yeast: From regulatory networks to mechanisms'

## PROJECTS

1- Investigating the biology and therapeutic vulnerabilities of ER+ metastatic breast cancer with activating HER2 mutations

[2021 – 2024] JHU- Postdoctoral research project
NCI K22 GRANT (USA), 1K22CA241377-01A1, PD/PI: Utthara Nayar Johns Hopkins University (JHU) (MD, USA)

2- Understanding how two related mammalian histone acetyl transferase co-activators, SAGA and ATAC, differentially regulate chromatin dynamics and transcription

[2019 – 2023] IGBMC- Postdoctoral research project
NIH RO1 GRANT (USA), 1R01GM131626-01, PD/PI: M. Poirier, Ohio State University (OSU, USA)

3- Biological characterization of molecular interactions of ADA proteins, as a component of histone acetyltransferase complexes

[2013 – 2015] Ege University- Master thesis project
The Scientific and Technological Research Council of Turkey (TUBITAK) GRANT (TURKEY), 112T429, Coordinator: S. Zencir, Pamukkale University (Izmir, Turkey)

4- Identification of the molecular interaction partners of human topoisomerase II enzyme employed in chemotherapy and evaluation of their pharmaceutical significance

[2013 – 2015] Ege University- Scholarship student of the project
The Scientific and Technological Research Council of Turkey (TUBITAK) GRANT (TURKEY), 112S492, Coordinator: Z. Topcu, Ege University (Izmir, TURKEY)

## HONOURS AND AWARDS

1- Structure/function studies of the ATAC histone acetyltransferase coactivator transcription complex

[2018] EMBO Short-Term Fellowship (number 8001)- 90days

2- Characterization of the interactions among the subunits of histone acetyltransferases (HAT) complexes which play a role in the chromatin and transcriptional regulation

[2017-2018] The Scientific and Technological Research Council of Turkey (TUBITAK) 2214-A Overseas Research Scholarship Program (eligible for PhD students)-12 months

## PROFESSIONAL MEMBERSHIP

[2023- Present] American Association of Cancer Research (AACR)

## LAB SKILLS

Biochemistry and molecular biology/ Gen manipulations/ Phenotypic assays/ Cell Biology

Gateway cloning technologies, site-directed mutagenesis, RT-qPCR, PCR, Western blot, lentiviral production and transductions, baculovirus overexpression systems, protein purification, cell fractionation, In vitro acetylation assay (AT), yeast two-hybrid screening (Y2H), topoisomerase activity assays, siRNA, shRNA (constitutive and inducible) CRISPR-CAS9 KO technology (bulk), Cell viability assays, clonogenic assay, transwell invasion and migration assays, Immunofluorescence (IF), Single-molecule FISH (smFISH)

Tissue culture

2D adherent/suspension cell culture, patient-derived xenograft organoid cultures (PDXOs)

NGS/ Proteomics

Library preparation, RNA-seq (bulk), RIP coupled with RNA sequencing (RIP-seq), Cut&Run and Cut&Tag, ChIP-seq, ATAC-seq, Protein immunoprecipitation (IP), co-IP, IP coupled to mass spectrometry (IP-MS), RNA immunoprecipitation (RIP), qPLEX-RIME (chromatin IP)

Imaging techniques

Brightfield microscopy, Spinning disk epifluorescence, Confocal microscopy -SP8

Data analyzing tools

Microsoft Office, GraphPad- Prism, R studio, GSEA, Adobe Illustrator, Image J (Fiji), IGV/UCSC genome browser

**REFERENCES**

Laszlo Tora, PhD (Post-doc supervisor)
Principal Investigator, group leader
Development and Stem Cells Department
Institut de Génétique et de Biologie Moléculaire et Cellulaire (IGBMC) UMR 7104 CNRS, INSERM U1258, Université de Strasbourg (Unistra), 1, rue Laurent Fries,
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Principal Investigator and Professor
Ege University, Faculty of Pharmacy, Department of Pharmaceutical Biotechnology
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Michael G. Poirier, PhD (Collaborator in previous post-doc lab in IGBMC)
Professor and Chair
Department of Physics, Department of Chemistry & Biochemistry (by courtesy)
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Stephane Vincent, PhD, HDR (Resarcher in previous post-doc lab in IGBMC)
Researcher, INSERM
Development and stem cells Department
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