

## **Personal Information**

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## **Education Information**

Doctorate, Iowa State University of Science and Technology, Fen Edebiyat, Biochemistry, United States Of America  
2005 - 2012

Under Graduate, Middle East Technical University, Faculty of Arts and Sciences, Department of Biology, Turkey 1999 -  
2005

## **Foreign Languages**

English, C2 Proficiency

## **Dissertations**

Doctorate, Deciphering the Details of RNA Aminoglycoside Interactions: From Atomistic Models to Biotechnological Applications, Middle East Technical University, Life Sciences, Biochemistry, Biophysics and Molecular Biology, 2012

## **Research Areas**

Health Sciences, Medicine, Fundamental Medical Sciences, Biophysics, Biochemistry, Basic Sciences, Life Sciences, Biochemistry, Molecular Biochemistry

## **Academic Titles / Tasks**

Assistant Professor, Middle East Technical University, Faculty Of Arts And Sciences, Biological Sciences, 2017 -  
Continues

## **Professional Experience**

Deputy Head of Department, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Biology,  
2019 - Continues

## **Courses**

Biochemistry, Under Graduate, 2017 - 2018, 2018 - 2019

## **Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes**

- **Common Secondary and Tertiary Structural Features of Aptamer-Ligand Interaction Shared by RNA Aptamers with Different Primary Sequences**

İlgu M., Yan S., Khounlo R. M. , Lamm M. H. , Nilsen-Hamilton M.

MOLECULES, vol.24, 2019 (Journal Indexed in SCI)

- **Aptamer-enabled uptake of small molecule ligands**

Auwardt S. L. , Seo Y., Ilgu M., Ray J., Feldges R. R. , Shubham S., Bendickson L., Levine H. A. , Nilsen-Hamilton M.

SCIENTIFIC REPORTS, vol.8, 2018 (Journal Indexed in SCI)

- **Specificity and Ligand Affinities of the Cocaine Aptamer: Impact of Structural Features and Physiological NaCl**

Sachan A., Ilgu M., Kempema A., Kraus G. A. , Nilsen-Hamilton M.

ANALYTICAL CHEMISTRY, vol.88, pp.7715-7723, 2016 (Journal Indexed in SCI)

- **Light-up and FRET aptamer reporters; evaluating their applications for imaging transcription in eukaryotic cells**

Ilgu M., RAY J., BENDICKSON L., WANG T., Geraskin I. M. , Kraus G. A. , Nilsen-Hamilton M.

METHODS, vol.98, pp.26-33, 2016 (Journal Indexed in SCI)

- **Aptamers in analytics**

Ilgu M., Nilsen-Hamilton M.

ANALYST, vol.141, pp.1551-1568, 2016 (Journal Indexed in SCI)

- **IMAGEtags: Quantifying mRNA Transcription in Real Time with Multiaptamer Reporters**

Ray J., SHIN I., Ilgu M., BENDICKSON L., GUPTA V., KRAUS G. A. , NILSEN-HAMILTON M.

VISUALIZING RNA DYNAMICS IN THE CELL, vol.572, pp.193-213, 2016 (Journal Indexed in SCI)

- **An adaptable pentaloop defines a robust neomycin-B RNA aptamer with conditional ligand-bound structures**

Ilgu M., Fulton D. B. , Yennamalli R. M. , Lamm M. H. , Sen T. Z. , Nilsen-Hamilton M.

RNA, vol.20, pp.815-824, 2014 (Journal Indexed in SCI)

- **Live-cell imaging of Pol II promoter activity to monitor gene expression with RNA IMAGEtag reporters**

SHIN I., RAY J., Gupta V., Ilgu M., Beasley J., BENDICKSON L., MEHANOVIC S., Kraus G. A. , Nilsen-Hamilton M.

NUCLEIC ACIDS RESEARCH, vol.42, 2014 (Journal Indexed in SCI)

- **Investigating the malleability of RNA aptamers**

Ilgu M., WANG T., Lamm M. H. , Nilsen-Hamilton M.

METHODS, vol.63, pp.178-187, 2013 (Journal Indexed in SCI)

## Book & Book Chapters

- **Recent Advances in Analytical Chemistry**

Ilgü M., Nilsen-Hamilton M.

IntechOpen, London, 2019

## Citations

Total Citations (WOS):172

h-index (WOS):6