

# MUHAMMET AY

## DOKTOR ÖĞRETİM ÜYESİ

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### Öğrenim Bilgisi

Doktora 2011 7/Mayıs/2016	Iowa State University of Science and Technology Genetik  Tez adı: Translational drug discovery approaches targeting the PKD1 signaling in Parkinson's disease (2016) Tez Danışmanı:(Anumantha Kanthasamy)
Yüksek Lisans 2009 7/Mayıs/2011	Iowa State University {Iowa} BİYOMEDİKAL BİLİMLER (GENETİK)  Tez adı: Molecular cloning and characterization of the oxidative stress sensitive kinase PKD1 gene promoter in a cell culture model of Parkinson's disease (2011) Tez Danışmanı:(Anumantha Kanthasamy)
Lisans 2003 6/Temmuz/2007	İSTANBUL ÜNİVERSİTESİ FEN FAKÜLTESİ/MOLEKÜLER BİYOLOJİ VE GENETİK BÖLÜMÜ/MOLEKÜLER BİYOLOJİ VE GENETİK PR.

### Görevler

DOKTOR ÖĞRETİM ÜYESİ 2018	ALANYA ALAADDİN KEYKUBAT ÜNİVERSİTESİ/RAFET KAYIŞ MÜHENDİSLİK FAKÜLTESİ/GENETİK VE BİYOMÜHENDİSLİK BÖLÜMÜ/GENETİK VE BİYOMÜHENDİSLİK ANABİLİM DALI)
ARAŞTIRMA GÖREVLİSİ 2017-2018	ALANYA ALAADDİN KEYKUBAT ÜNİVERSİTESİ/RAFET KAYIŞ MÜHENDİSLİK FAKÜLTESİ/GENETİK VE BİYOMÜHENDİSLİK BÖLÜMÜ/GENETİK VE BİYOMÜHENDİSLİK ANABİLİM DALI)
UZMAN 2016-2017	Iowa State University/Department of Biomedical Sciences)
ARAŞTIRMA GÖREVLİSİ 2011-2016	Iowa State University/Department of Biomedical Sciences)

### Projelerde Yaptığı Görevler:

1. Bazı Fenolik Bileşenlerin Mitokondriyal Biyogenez Üzerine Etkilerinin Değerlendirilmesi ve Olası Anti-Parkinson Etkilerinin Moleküler Mekanizmalarının Ortaya Çıkarılması, -Tübitak 3501, Yürütücü:AY MUHAMMET, , 15/10/2018 (Devam Ediyor) (ULUSAL)

## İdari Görevler

Bölüm Başkanı  
2018-2019

ALANYA ALAADDİN KEYKUBAT ÜNİVERSİTESİ/RAFET KAYIŞ MÜHENDİSLİK  
FAKÜLTESİ/GENETİK VE BİYOMÜHENDİSLİK BÖLÜMÜ

## Bilimsel Kuruluşlara Üyelikler

1. Society of Toxicology, Üye , 2014

## Ödüller

1. Research Excellence Award, Iowa State University, AMERİKA BİRLEŞİK DEVLETLERİ, 2016
2. Travel Award, Society of Toxicology, AMERİKA BİRLEŞİK DEVLETLERİ, 2015
3. Drug Discovery Toxicology SS Emil A. Pfitzer Student Award, Society of Toxicology, AMERİKA BİRLEŞİK DEVLETLERİ, 2014
4. Best Student Poster Award, Central States of the Society of Toxicology (CS-SOT), AMERİKA BİRLEŞİK DEVLETLERİ, 2013

## Dersler \*

Öğretim Dili Ders Saati

### 2019-2020

#### Lisans

Biochemistry	ngilizce	3
Genetics	ngilizce	3
İngilizce III	ngilizce	3
Report Writing and Presentation Skills	ngilizce	3
Introduction to Genetics and Bioengineering	ngilizce	2

#### Yüksek Lisans

Nörogenetik	Türkçe	3
Yüksek Lisans Uzmanlık Alan Dersi	Türkçe	8
Danışmanlık	Türkçe	1

### 2018-2019

#### Lisans

Biyoteknoloji	Türkçe	3
Introduction to Genetics and Bioengineering	ngilizce	2

### 2017-2018

#### Lisans

İngilizce III	ngilizce	3
Tehlikeli Madde Lojistiği	Türkçe	3

## Eserler

### Uluslararası hakemli dergilerde yayımlanan makaleler:

1. Ghaisas Shivani, Langley Monica R, Palanisamy Bharathi N, Dutta Somak, Narayanaswamy Kirthi, Plummer Paul J, Sarkar Souvarish, AY MUHAMMET, Jin Huajun, Anantharam Vellareddy, Kanthasamy Arthi, Kanthasamy Anumantha G (2019). MitoPark transgenic mouse model recapitulates the gastrointestinal dysfunction and gut-microbiome changes of Parkinson's

## Uluslararası hakemli dergilerde yayımlanan makaleler:

NEUROTOXICOLOGY, 75, 186-199. (Yayın No: 6231840)

2. Langley Monica R, Ghaisas Shivani, AY MUHAMMET, Luo Jie, Palanisamy Bharathi N, Jin Huajun, Anantharam Vellareddy, Kanthasamy Arthi, Kanthasamy Anumantha G (2018). Manganese exposure exacerbates progressive motor deficits and neurodegeneration in the MitoPark mouse model of Parkinson's disease: Relevance to gene and environment interactions in metal neurotoxicity. *NEUROTOXICOLOGY*, 64, 240-255., Doi: 10.1016/j.neuro.2017.06.002 (Yayın No: 3751051)
3. Langley Monica, Ghosh Anamitra, Charli Adhithiya, Sarkar Souvarish, AY MUHAMMET, Luo Jie, Zielonka Jacek, Brenza Timothy, Bennett Brian, Jin Huajun, Ghaisas Shivani, Schlichtmann Benjamin, Kim Dongsuk, Anantharam Vellareddy, Kanthasamy Arthi, Narasimhan Balaji, Kalyanaraman Balaraman, Kanthasamy Anumantha G. (2017). Mito-Apocynin Prevents Mitochondrial Dysfunction, Microglial Activation, Oxidative Damage, and Progressive Neurodegeneration in MitoPark Transgenic Mice. *ANTIOXIDANTS REDOX SIGNALING*, 27(14), 1048-1066., Doi: 10.1089/ars.2016.6905 (Yayın No: 3750856)
4. AY MUHAMMET, Luo Jie, Langley Monica, Jin Huajun, Anantharam Vellareddy, Kanthasamy Arthi, Kanthasamy Anumantha G. (2017). Molecular mechanisms underlying protective effects of quercetin against mitochondrial dysfunction and progressive dopaminergic neurodegeneration in cell culture and MitoPark transgenic mouse models of Parkinson's Disease. *JOURNAL OF NEUROCHEMISTRY*, 141(5), 766-782., Doi: 10.1111/jnc.14033 (Yayın No: 3750750)
5. AY MUHAMMET, Jin Huajun, Harischandra Dilshan S., Asaithambi Arunkumar, Kanthasamy Arthi, Anantharam Vellareddy, Kanthasamy Anumantha G. (2015). Molecular cloning, epigenetic regulation, and functional characterization of Prkd1 gene promoter in dopaminergic cell culture models of Parkinson's disease. *JOURNAL OF NEUROCHEMISTRY*, 135(2), 402-415., Doi: 10.1111/jnc.13261 (Yayın No: 3750923)
6. Asaithambi Arunkumar, AY MUHAMMET, Jin Huajun, Ghosh Anamitra, Anantharam Vellareddy, Kanthasamy Arthi, Kanthasamy Anumantha G. (2014). Protein Kinase D1 (PKD1) Phosphorylation Promotes Dopaminergic Neuronal Survival during 6-OHDA-Induced Oxidative Stress. *PLOS ONE*, 9(5), Doi: 10.1371/journal.pone.0096947 (Yayın No: 3750660)

## B. Uluslararası bilimsel toplantılarda sunulan ve bildiri kitaplarında (proceedings) basılan bildiriler :

1. AY MUHAMMET, Asaithambi Arunkumar, Harischandra Dilshan, Kanthasamy Arthi, Jin Huajun, Anantharam Vellareddy, Kanthasamy Anumantha G (2016). PKD1 Activation Positively Regulates PGC-1? Transcriptional Activity and Protects Against Dopaminergic Neurodegeneration. *Society for Neuroscience (/Poster)*(Yayın No:6231851)
2. Charli Adhithiya, Luo Jie, Langley Monica R, AY MUHAMMET, Jin Huajun, Anantharam Vellareddy, Kanthasamy Arthi, Kanthasamy Anumantha G (2016). Mitochondrial Neurotoxic Pesticides Promote Epigenetic Dysregulation by Histone Hyperacetylation in Dopaminergic Neurons. *Toxicoepigenetics: The Interface of Epigenetics and Risk Assessment (/Poster)*(Yayın No:6231852)
3. Kanthasamy Anumantha G, AY MUHAMMET, Luo Jie, Langley Monica R, Jin Huajun, Anantharam Vellareddy, Kanthasamy Arthi (2015). Small Molecule PKD1 Activator Protects Progressive Nigral Dopaminergic Neuronal Degeneration in the MitoPark Animal Model of PD. *International Society for Neurochemistry (/Poster)*(Yayın No:6231862)
4. Langley Monica R, Ghosh Anamitra, AY MUHAMMET, Jin Huajun, Anantharam Vellareddy, Kanthasamy Arthi, Dranka Brian, Kalyanaraman Balaraman, Kanthasamy Anumantha G (2015). Preclinical Efficacy Testing of the Mitochondria-Targeted Antioxidant Mito-Apocynin in the Transgenic MitoPark Mouse Model of Chronic Dopaminergic Neurodegeneration. *Society of Toxicology (/Poster)*(Yayın No:6231869)
5. AY MUHAMMET, Charli Adhithiya, Kanthasamy Arthi, Anantharam Vellareddy, Jin Huajun, Kalyanaraman Balaraman, Kanthasamy Anumantha G (2015). Novel Mitochondria-Targeted Drug Induces PKD1 Activation and Its Downstream Prosurvival Signaling to Promote Mitochondrial Biogenesis against Dopaminergic Neurotoxicity. *Society of Toxicology (/Poster)*(Yayın No:6231867)
6. Langley Monica R, AY MUHAMMET, Ghaisas Shivani, Jin Huajun, Anantharam Vellareddy, Kanthasamy Arthi, Kanthasamy Anumantha G (2014). Nonmotor Symptoms in Mitopark Mouse Model of Parkinson's Disease. *Society of Toxicology (/Poster)*(Yayın No:6231873)
7. AY MUHAMMET, Luo Jie, Kanthasamy Arthi, Anantharam Vellareddy, Langley Monica R, Jin Huajun, Kanthasamy Anumantha G (2014). Quercetin Treatment Protects Progressive Nigral Dopaminergic Neuronal Degeneration in Cell Culture and MitoPark Animal Models of Parkinson's Disease by Activating PKD1 Signaling. *Society of Toxicology (/Poster)*(Yayın No:6231871)

8. AY MUHAMMET,Kanhasamy Arthi,Jin Huajun,Kim Dong S,Anantharam Vellareddy,Kanhasamy Anumantha G (2013). Manganese Exposure Alters Mitochondrial Biogenesis in Dopaminergic Neuronal Cells. Society of Toxicology (/Poster)(Yayın No:6231878)
9. Kanhasamy Anumantha G,Asaithambi Arunkumar,Ghosh Anamitra,AY MUHAMMET,Jin Huajun,Neal Matthew,Mullin Kathleen,Anantharam Vellareddy,Kanhasamy Arthi (2012). Rationally Designed PKD1 Activator Protects against Neurodegeneration in Pre-clinical Models of Parkinson's Disease. Society for Neuroscience (/Poster)(Yayın No:6231882)
10. AY MUHAMMET,Jin Huajun,Kanhasamy Arthi,Asaithambi Arunkumar,Anantharam Vellareddy,Kanhasamy Anumantha G (2011). Molecular Cloning and Functional Characterization of the Oxidative-Stress Sensitive Kinase PKD1 Gene Promoter in a Cell Culture Model of Parkinson's Disease. Society for Neuroscience (/Poster)(Yayın No:6231885)

### C. Yazılan ulusal/uluslararası kitaplar veya kitaplardaki bölümler:

#### C2. Yazılan ulusal/uluslararası kitaplardaki bölümler:

1. Advances in Neurobiology, Bölüm adı:(Neurotoxicity of Vanadium) (2017)., Ngwa Hilary Afeseh,AY MUHAMMET,Jin Huajun,Anantharam Vellareddy,Kanhasamy Arthi,Kanhasamy Anumantha G, Springer, Cham, Editör:Aschner Michael, Costa Lucio, Basım sayısı:1, ISBN:978-3-319-60189-2, İngilizce(Bilimsel Kitap), (Yayın No: 3661299)
2. Nutraceuticals: Efficacy, Safety and Toxicity, Bölüm adı:(Quercetin) (2016)., AY MUHAMMET,Charli Adhithiya,Jin Huajun,Anantharam Vellareddy,Kanhasamy Arthi,Kanhasamy Anumantha G, Elsevier, Basım sayısı:1, Sayfa Sayısı 1040, ISBN:9780128021477, İngilizce(Bilimsel Kitap), (Yayın No: 3608254)