



Ibn Khaldun Fellowship  
for Saudi Arabian Women  
**MIT** Massachusetts  
Institute of  
Technology



**KACST**  
مدينة الملك عبدالعزيز  
للعلوم والتقنية

# Ibn Khaldun Fellowship for Saudi Arabian Women

Presenters  
Prof Kamal Youcef-Toumi & Dorothy Hanna





# Outline



1. IBK Program History
2. Why MIT?
3. Fellowship Overview
4. How to Apply
5. Q&A



Dr. Lamyaa Almehmadi  
Spectroscopy



Dr. Maryam Alsharqi  
Cardiology Imaging



Dr. Sharifa Alghowinem  
AI & Personal Robots



Dr. Eman Ageely  
Genetics





# Program History



The fellowship was established through an MIT-KFUPM collaboration.

The first fellows were admitted in 2012.



Center for Clean Water and Clean Energy at MIT & KFUPM





# Program History



أرامكو السعودية  
Saudi Aramco

2013 - Saudi Aramco expanded the program



2018 - KACST and MIT signed a 10-year agreement



10th Anniversary Celebration at KACST in 2022





# IBK Fellowship – Impact To Date



**Fellows: 55**

**Patents filed: 8**

**Total Publications: 135**

**Journal: 80**

**Conference: 55**

## **Former Fellows in Leadership roles:**

- Senior Leaders in KSA Government & Academia: 52%
- Bridge Leaders investing in the KSA from abroad: 4%



Pictured, the first IBK fellow Dr. Malak Al Nory mentors students for MIT class 2.009 Product Engineering Processes.

Today, Dr. Malak is an Advisor for the Ministry of Energy.



# Why come to MIT? Innovation Leadership



## MIT is known as an innovation hub

1. In 2023 MIT secured 365 utility patents issued by the United States Patent Office.
2. 30,000 companies founded by MIT alumni were active as of 2014.
  - Representing 4.6 million jobs
  - Annual revenues of \$1.9 trillion (~ 10<sup>th</sup> largest economy)



*“Being at MIT as an IBK fellow helped me think about the future of science. This experience gave me the tools and mindset to investigate critical areas of research and tackle the most pressing challenges facing our society today and in the future.”*

— Dr. Dana Al-Sulaiman



# Why come to MIT? Mission



“We seek to develop in each member of the MIT community the ability and passion to work wisely, creatively, and effectively for the betterment of humankind.”





# Why come to MIT? Interdisciplinary & Hands on Research



Lisa Su building housing MIT.nano 20,000 m<sup>2</sup>

Interdepartmental shared research infrastructure fosters interdisciplinary collaboration & innovation

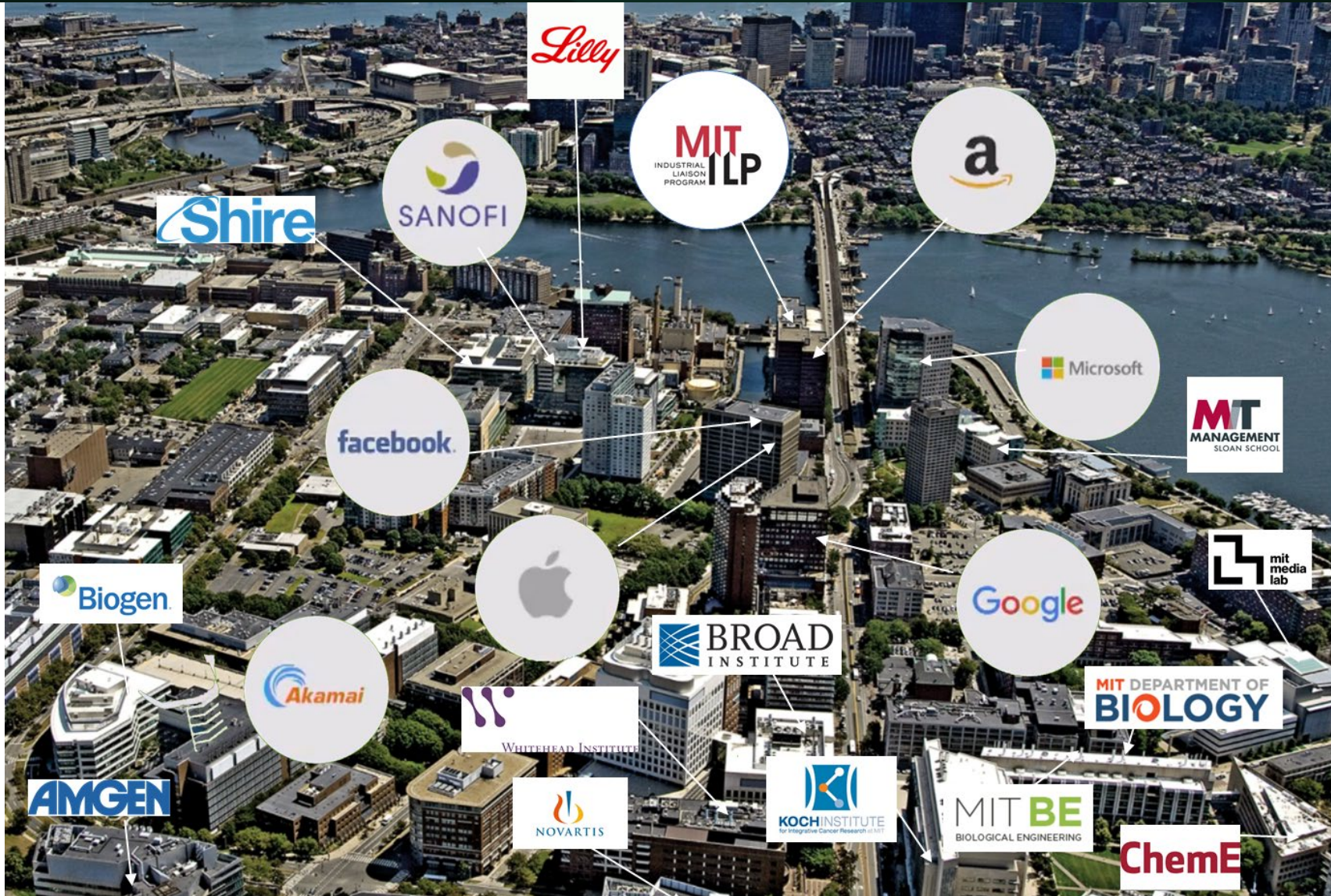
- Animal modeling and clinical testing
- Cell culture and analysis
- Chemistry synthesis and analysis
- Data analysis
- Fabrication
- Imaging
- Materials production and analysis
- Cleanrooms
- Materials growth
- Maker Space
- 3D Printing
- Computer-aided visualization





# Why come to MIT?

Location: Kendall Square, Cambridge & Boston







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## Location: Kendall Square, Cambridge & Boston



MIT ENERGY IT/DATA BIO/PHARMA VC



# IBK Fellowship – Overview



The Fellowship is a one or two year research opportunity for Saudi Arabian women who hold a PhD with competitive and merit-based admission.

***Hands-on research is the central goal of the program.***

- Collaborate with an MIT professor and research group
- Access world-class facilities and support
- Professional development opportunities to supplement research



Dr. Wedyan Babatain  
& MIT PhD candidate Ozgun Kilic  
Soft Electronics for Healthcare & the Environment





# IBK Fellowship – Overview



## Who are the IBK fellows?

- 5 fellows are accepted per year
- Fellows come from top PhD programs mostly in KSA, USA & UK, but also others including Australia and Japan.
- 8.4% acceptance rate for 2024 cohort. (MIT graduate programs have 11% acceptance)
- Fellows represent 17+ Saudi institutions in 6+ cities.

Dr. Maha Aljuhani  
Chemical Science



Dr. Eman Ageely  
Genetics



# IBK Fellowship – MIT Host Departments



## IBK fellows have worked in 20+ MIT departments including:

- Aeronautics & Astronautics
- Biology
- Computer Science and Artificial Intelligence Lab
- Chemistry
- Koch Cancer Research Institute
- Mathematics
- McGovern Institute for Brain Research
- Mechanical Engineering
- Media Lab
- Nuclear Science & Engineering
- Research Lab of Electronics
- Sloan School of Management







# IBK Fellowship - Faculty Matching



IBK fellows have worked with 50 different MIT faculty!

- We help you connect with MIT professors who are a good match for your research interests.
- The IBK team works with new fellows to set up interviews and finding a strong fit.



**Kamal Youcef-Toumi**  
ROBOTICS



**Ahmed Ghoniem**  
COMPUTATIONAL ENGINEERING



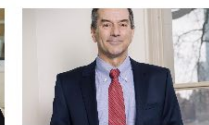
**Alex K. Shalek**  
MEDICAL ENGINEERING AND SCIENCE & CHEMISTRY



**James Wescoat**  
LANDSCAPE ARCHITECTURE AND GEOGRAPHY



**John Gabrieli**  
NEUROIMAGING



**John Lienhard**  
WATER AND FOOD SYSTEMS



**Alexie Kolpak**  
COMPUTATIONAL MATERIALS DESIGN



**Alfredo Alexander-Katz**  
SOFT MATTER AND COMPUTATION & DESIGN



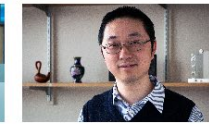
**Brandon DeKosky**  
MOLECULAR BIOTECHNOLOGY



**John R. Williams**  
COMPUTATIONAL METHODS



**Jonathan How**  
TECHNOLOGY SYSTEMS AND SPACE ENGINEERING



**Juejun Hu**  
MATERIALS SCIENCE AND ENGINEERING



**Christopher C. Cummins**  
CHEMISTRY



**Cynthia Breazeal**  
PERSONAL ROBOTS



**Daniel Anderson**  
NANOTHERAPEUTICS AND BIOMATERIALS



**Manolis Kellis**  
GENOMICS



**Maria Yang**  
ENGINEERING DESIGN



**Martin Polz**  
MICROBIOLOGY



**Dennis Whyte**  
NUCLEAR FUSION



**Dirk Englund**  
QUANTUM PHOTONICS AND AI



**Elazer Edelman**  
MEDICAL ENGINEERING AND SCIENCE



**Michael Short**  
NUCLEAR POWER



**Mircea Dincă**  
CHEMISTRY



**Moe Win**  
WIRELESS, OPTICAL & SPACE COMMUNICATION SYSTEMS



**Fikile R. Brushett**  
ELECTROCHEMICAL TECHNOLOGY



**Graham Walker**  
DNA REPAIR AND MUTAGENESIS



**Guoping Feng**  
NEUROSCIENCE



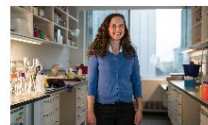
**Mriganka Sur**  
NEUROSCIENCE



**Nasser Rabbat**  
ISLAMIC ARCHITECTURE AND URBANISM



**Patrick Doyle**  
SOFT MATTER ENGINEERING



**Hadley Sikes**  
CHEMICAL ENGINEERING



**Heather Kulik**  
COMPUTATIONAL MATERIALS



**Hiroshi Ishii**  
MEDIA ARTS AND SCIENCES



**Paula Hammond**  
POLYMERIC NANOMATERIALS



**Pavel Etingof**  
REPRESENTATION THEORY



**Regina Barzilay**  
AI & HEALTH





# Professional Development Opportunities



**The fellowship provides a small allowance to pay for professional development.**

It covers partial cost of courses from:

- MIT Professional & Executive Learning
- MIT Sloan School of Management
- Harvard Business School

Or other diverse courses & activities :

- Computer programming languages
- Lab management
- Conferences
- Workshops





# Professional Development Opportunities



## Many of the richest experiences are free!

- Kaufman Teaching Certificate Program
- Martin Trust Center for Entrepreneurship
- Departmental Communications Labs
- Mentoring UROPs (undergrad researchers)
- LEAdership and Professional Strategies & Skills (LEAPS) program
- MIT PostDoc Association
  - workshops
  - leadership opportunities
- & many more



2017 Fellows Drs. Shada Al Salamah, Thamraa AlShahrani, Haleema AlAmri, Sufana AlMashhadi, and Amal AlDossary receive Kaufman Teaching Certificates.



# IBK Community – Networking & Collaboration



- Orientation
- Area cultural trips/activities
- Workshops

IBK Tubing  
Adventure  
2023



Eid Al Adha Dinner 2024



Serving Saudi treats at MIT  
Cultural Festival 2019





# Resources for Children



- Free, excellent schools for children
- City of Cambridge was the first US public school system to officially recognize Eid al-Fitr holiday
- MIT provides a supplement to help with childcare costs for young children



## Apply – Do you fit the criteria?

1. Be a woman who is a Saudi Arabian citizen
2. Excellent command of spoken & written English
3. Demonstrated ability to conduct research
4. 2+ publications in peer reviewed journals
5. Match with MIT faculty current research
6. Ph.D. within 6 years before program start date:  
September 1, 2019 – August 31, 2025



Dr. Hend Alrasheed  
Information Technology



## Apply – What makes a strong application?

1. What impact have you made?
  - a) Impact of current or recent research
  - b) Describe your area of expertise
  - c) Two recent recommendations describing your research outcomes and ability

Dr. Rawan Alsubaie  
Neuroscience



## Apply – What makes a strong application?

2. Organized plan for research you would like to do at MIT
  - b) What impact are you hoping to make?
  - c) Which MIT faculty have the best research match with these goals?

Dr. Alaa Algargoosh & lab teammates  
Architecture - Acoustics





# IBK Application Journey: September - November



## Deadlines:

- Application: **Nov 19<sup>th</sup>, 9am EST**
- 2 Rec Letters: **Dec 2<sup>nd</sup>, 9am EST**


## Required:

- Application form: [ibk.mit.edu/application](http://ibk.mit.edu/application)
- Current CV (pdf)
- Most significant publication (pdf)
- 2 Recommendation Letters  
(use form to request after application submitted)

### Dorothy Example2

Name	Email	Affiliation		
Faculty 1	dhanna@mit.edu	MIT	RESEND EMAIL →	X
Dr. Recommender Two	ibk@mit.edu	MIT	SEND EMAIL →	X

Name:

Email:  

Affiliation:

## December

- IBK team & MIT faculty review applications
- KACST team reviews applications

## January

- Decisions made about top candidates
- Top candidates invited for video interviews



Dr. Walaa Khushaim & colleague  
Biosensors



# IBK Application Journey: February - September



## February

- Acceptance or feedback letters

## March - May

- Accepted fellows meet with potential faculty
- Lab matching decisions made

## June - August

- US Visa & MIT appointment process



**September 2025**  
Get to know your  
lab at MIT!

Please visit [ibk.mit.edu](https://ibk.mit.edu) or email us at [ibk@mit.edu](mailto:ibk@mit.edu) for more info.

One of the IBK admin team members will answer your email:



Dorothy Hanna



Barbra Williams



Isabel Welch



*Thank you*

شكرا

