

### An Innovative University with a Successful Research and IP Management System

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Sabancı University

TRANSATLANTIC EU - U.S. COOPERATION ON INNOVATION AND TECHNOLOGY TRANSFER

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Vienna





- Universities
  - State (102)
  - Foundation (54)
- Higher Education Council (HEC)





- Not to profit organizations
- Self Financed (State Contribution is minimum)
- Accountable to HEC.
- Important element of Turkish higher education



- Sabancı Group is the second biggest industrial group in Turkey
- Sabanci Foundation since 1955, made more then 150 investments all around Turkey( Schools, dormitories, hospitals etc) within their social responsability projects
- Founder of the Sabancı University

400 M\$ Investment since 1994

10-15 M\$ subsidy every year.

# The creation process was long and inclusive



- July 1994 Resolution by Sabanci Holding Executive Board
  - Search Conference with 52 participants from 22 countries & Formulation of "The Philosophy"
- February 1996 Various Task
  Curricular and

August 1995

Various Task Forces Start Working on Curricular and Administrative Structure



# The creation process was long and inclusive



- July 1997 Groundbreaking by the President of Turkey
  Announcement of the Board of Trustees & The University President
- October 1999
- First Academic Year





*"Creating and Developing Together" Key Words* 

- Student Focused
- Participative
- Responsible and Responsive
- Practice Relevance
- Developing science and technology, disseminating knowledge

- Interdisciplinary
- Self-Managing /
- Self-Sustaining
- Teamwork
- Local / Regional / Global
- Learning to Learn



is to develop competent and confident individuals, enriched with the ability to reflect critically and independently, having a strong sense of social responsibility; and to contribute to the development of science and technology, as well as disseminating the knowledge created to the benefit of the community.



Güler Sabancı	Chairperson
Prof. A. Nihat Berker	President
Dr. Can Paker	BOY Management Services
Halis Komili	Komili Holding
Hayri Çulhacı	Akbank
Muharrem Kayhan	Söktaş Holding
Prof. Sadık Esener	Nano-Tumor Center, University of California at San Diego
Sevil Sabancı	Sabancı Holding
Suzan Sabancı Dinçer	Akbank

## **International Board of Overseers**



Güler Sabancı Sabanci Holding Lady Barbara T. Judge UK Atomic Energy Authority, Chairperson Baron Paul Buysse N.V. Bekaert S.A, Chairman of the Board Candace Johnson Johnson Paradigm Ventures, President Lord Chris Patten : Oxford University, Chancellor Prof. David Pines Institute for Complex Adaptive Matter, Co-Director Dr. Kemal Dervis Boorkings Institute, Vice President Senator Phil Gramm UBS Investment Bank. Vice Chairman Richard Christou E Fujitsu Services, Executive Chairman Deutsche Bank, Former Chairman of the Supervisory Dr. Rolf E. Breuer Board Bridgestone Corporation, Chairman of the Board and Shoshi Arakawa CEO Prof. Timothy W. Tong The Hong Kong Polytechnic University, President Dr. Xiang Wang Orrick, Herrington & Sutcliffe LLP, Partner

# Our distinguishing characteristics set us apart



- Interdisciplinarity: No Academic Departments!
- Opportunity for students to decide on their academic field at the end of sophomore year to choose the degree program and selecting the most appropriate field through:
  - Acquiring knowledge on different topics
  - Effective tutoring system

# Foundations Development Program:

- School of Languages (English, Turkish and other second foreign languages)
- University Courses

# Undergraduate Degrees



## Faculty of Engineering and Natural Sciences

- Computer Science and Eng.
- Biological Sciences and Bioeng.
- Electronics Engineering
- Materials Science and Eng.
- Manufacturing Systems Eng.
- Mechatronics

## Faculty of Arts and Social Sciences

- Cultural Studies
- Economics
- Social and Political Sciences
- Visual Arts & Visual Communication Design

## **Faculty of Management**

Management

Minor Honor Programs in Mathematics, Chemistry, Physics, Art Theory and Criticism

# Graduate Degrees

### Graduate School of Engineering and Natural Sciences

- Biological Sciences and Bioengineering
- Computer Science & Engineering
- Electronics Engineering
- Physics
- Industrial Engineering
- Information Technology
- Leaders For Industry (with FMAN)
- Materials Sciences and Engineering
- Mathematics
- Mechatronics

### Graduate School of Management

- Master of Business Administration MBA
- Executive MBA
- Master in Finance
- PhD in Management

### Graduate School of Social Sciences

- Conflict Analysis & Resolution
- Cultural Studies
- Economics
- European Studies
- History
- Political Sciences
- Turkish Studies
- Visual Arts & Visual Communication Design



## We attract young but experienced Faculty Members



	# of Faculty	Av. Age	PhD Abroad	Last Place of Work Abroad	Av. Years of Non-Academic Work Exp.
TOTAL	172	43,7	150	60%	4,4

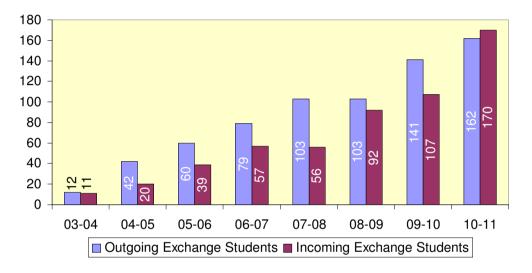
	# of Instructors	Average Age	# and % of Native Speakers	Av. Years of Teaching Exper.
School of Languages	58	40	22 (38%)	17

Ratio of International Faculty Members = 15%

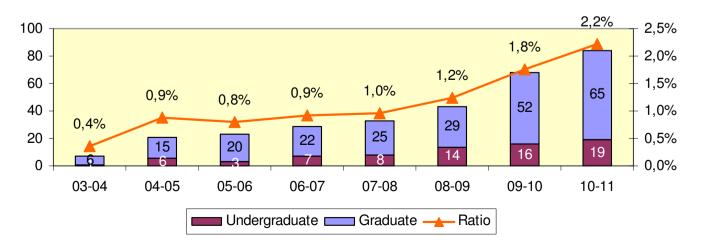
# International Student Ratio is increasing



Exchange Students







# 26% of our 4042 Alumni pursue graduate studies



Stanford Universit	y Brown Unive	ersity MIT	-
	Cornell University	University of Chicago	
Northwestern University	y	University of California	ł
London School of Econom	nics		
	Cambridge Unive	ersity	
Koc University		Carnegie Mellon Universit	у
	Max Planck Institute		
University of Pittsburg	University of Minneso	Harvard Univers	ity
Bilkent University	Bogazi	ci University	
Sab	ancı University	Texas A&M Universit	ţ

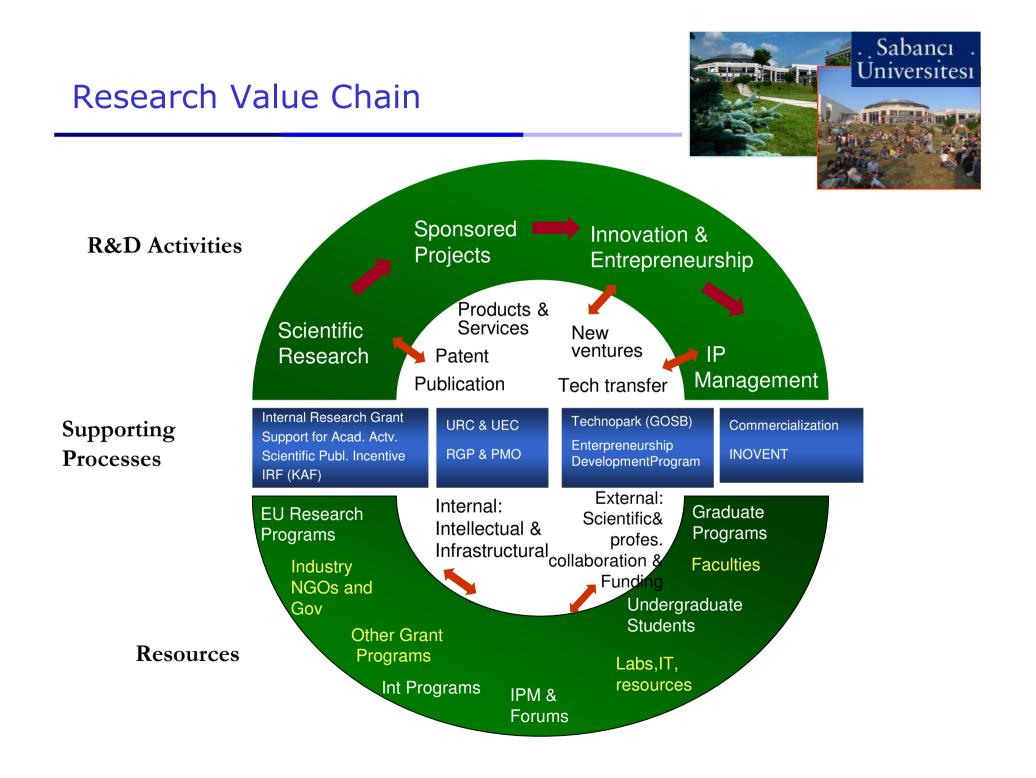
# 55% of our Alumni pursue professional careers



Garanti Technology		Procter 8	Gamble		
	Beksa		Coca-Cola		
Unilever		Deutsche B	ank		
	TUBITAK	Akbank	Decue		
Kord	SA		Dogus		
Ford	Borusan		Efes Pilsen		
TOTO		Siemens			
	Turkcell		Toyota		
BriSA	Garanti Bank	Delo	itte		
Start-up companies founded by SU Alumni in areas such as Information Technology, Software Development, and Advanced Materials, of which two are based abroad.					



# **Research and IP Management**



## Research Management process at Sabanci University

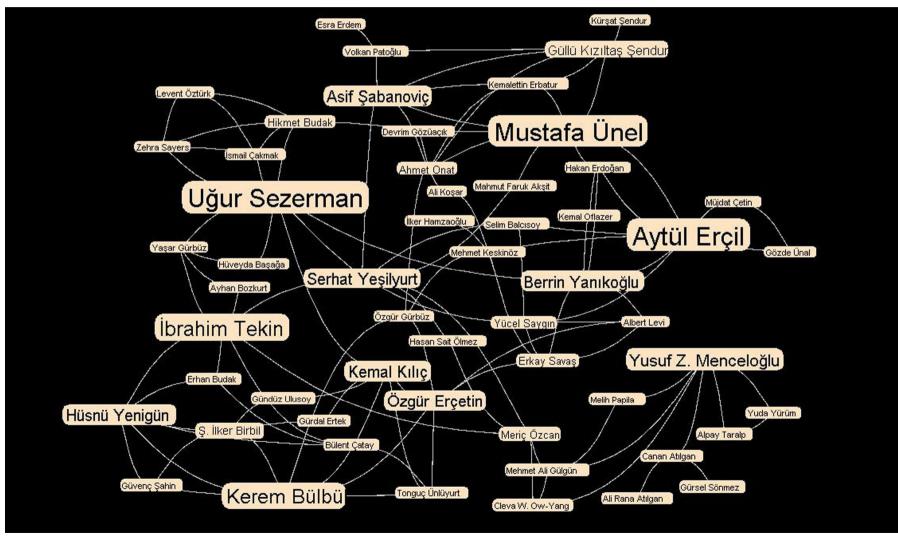


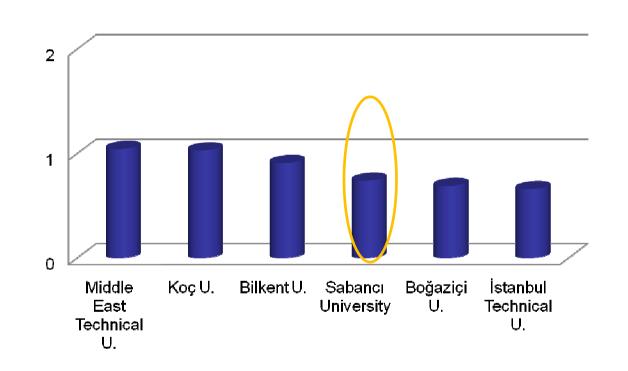
Sabanci

Iniversitesi

### RESEARCH COLLOBORATIONS BETWEEN FENS FACULTY MEMBERS





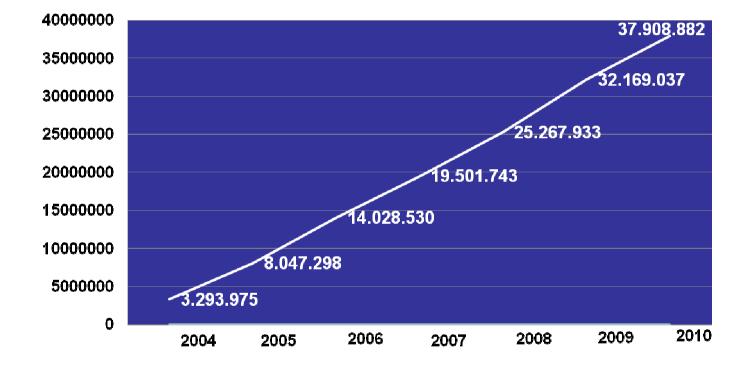


# Average Indexed Publications Per Faculty (2006-2009)



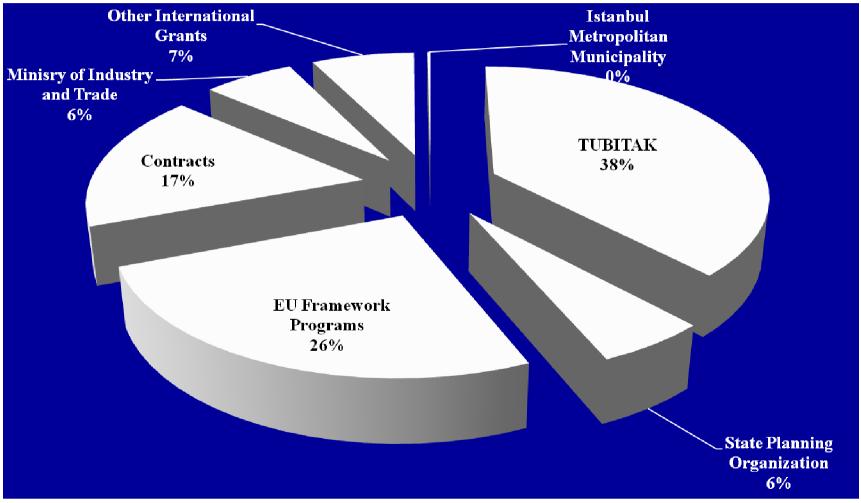
# Cumulative Growth of Sponsored Research Funding (2004-2010) (M€)





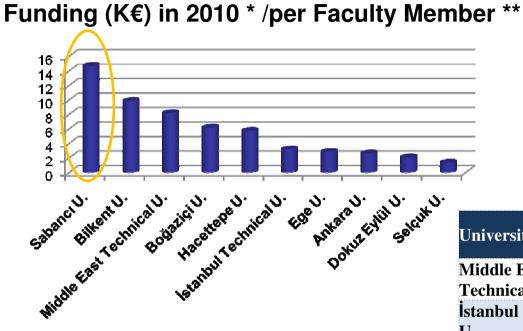
## Funding Distribution Based on Sponsoring Agency (2004-2010)





Performance Comparison of Turkish Universities in TUBITAK Research Grants





University	Funding (K€) in 2010	# of Faculty Member
Middle East Technical U.	6.044	739
İstanbul Technical U.	5.400	1703
Ankara U.	4.209	1605
Ege U.	4.120	1443
Bilkent U.	3.443	350
Sabancı U.	2.523	172
Dokuz Eylül U.	2.336	1126
Selçuk U.	2.311	1707
Hacettepe U.	2.298	401
Boğaziçi U.	2.217	359

\* http://www.tubitak.gov.tr/tubitak\_content\_files/ARDEB/ARDEB10.pdf

\*\* http://www.yok.gov.tr/content/view/527/222/

### TURKEY'S EU 7TH Framework Program Performance (2007-2010)



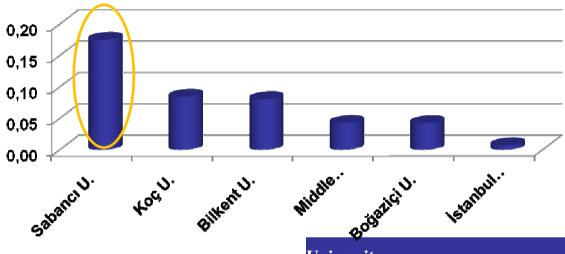
	FP6 (2003-2006)	FP7 (2007-2010)
Share of Turkish Partners (million €)	53,5	82,4
National Contributions (million €)	185	80,5
Share of Turkish Partners/National Contributions	28,9%	102,4%

	University	OTHERS (Industry, NGOs)
CD7 Total Dudget	38,7 Million €	43,7 Million €
FP7 Total Budget	47%	53%

# FP7 Performance of the Turkish Universities (2007-2010)

## FP7 Total University Budget 38,7 M€, %47

Number of Project / Per Faculty Member



University	# of Project * #	of Faculty Member **
Middle East Technical U.	31	739
Sabanct U.	30	172
Bilkent U.	28	350
Boğaziçi U.	15	359
Koç U.	14	167
İstanbul Technical U.	11	1703

. Sabancı

Universitesi

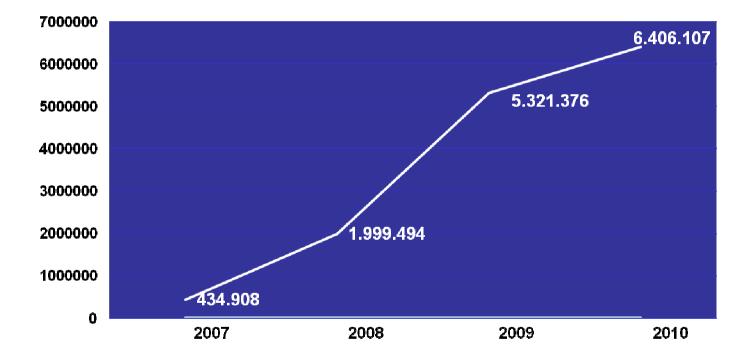
\* http://www.tubitak.gov.tr/tubitak\_content\_files//BTYPD/btyk/22/BTYK22\_Ek2\_AB\_7CP\_Ulke\_Performansi.pdf

\*\* http://www.yok.gov.tr/content/view/527/222/

SABANCI UNIVERSITY'S EU 7TH Framework Program Performance (2007-2010)



## **FP7 Total Budget 82,4 M€, SU share 6,4 M€ (%7)**



### FP7 Total University Budget 38,7M€, SU Share 6,4 M€ (%15.3)

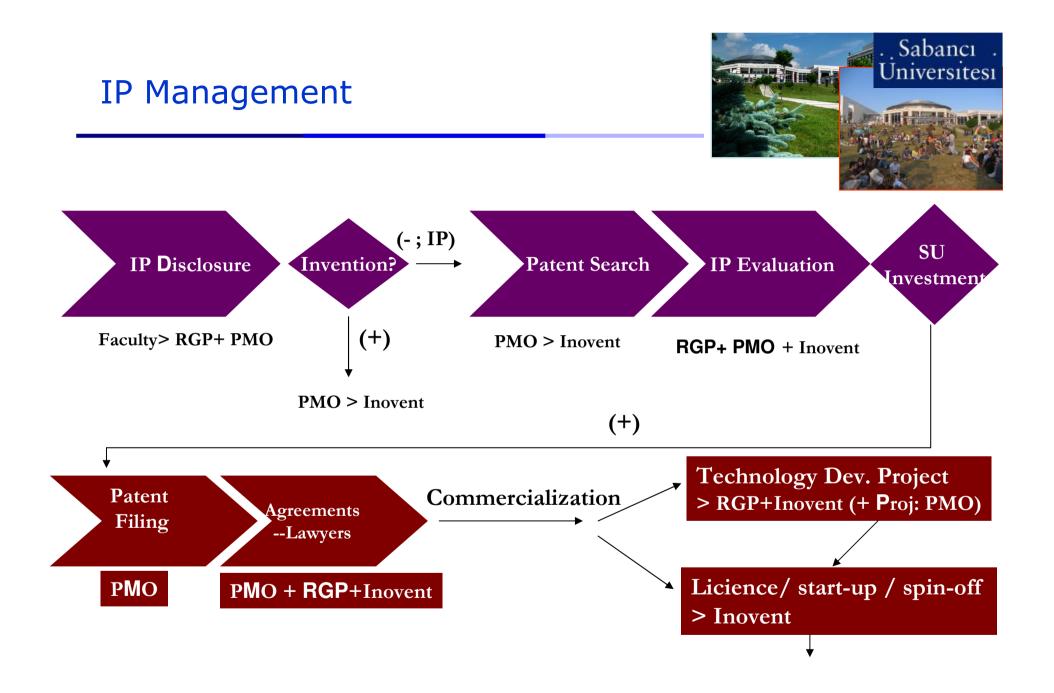
### **External Research Projects (ERP), Technology Transfer Projects (TTP) and Publications At SU**



	# of Faculty	ТТР	ERP	Publications	Publications/Per Faculty (%)	ERP/Per Faculty (%)
Total	95	86	280	901	9,5	2,9
Involved in TTP	26	86	167	380	14,6	6,4

#### Distribution of Sabancı University Faculty Member's (Involved in TTP) According to Disciplines

Computer Science	5 Faculty Members
Biological Sciences and	
Bioengineering	<b>3 Faculty Members</b>
Mechatronics	3 Faculty Members
Materials Science and Eng.	3 Faculty Members
Manufacturing Systems &	
Industrial Eng	6 Faculty Members
Electronics Engineering	6 Faculty Members





- Sabanci University Technologies
  - 41 IP Disclosure
  - 2 International Patents
  - 21 Application
- 19 of SU faculty members have 160 patents.

INOVENT: Intellectual Property Rights Management & Investment Inc.



- Founded in 2006 by Sabanci University, Inovent was the first technology commercialization office to be established in Turkey.
- Specialized in commercialization and Financing of IPs, business ideas and technologies developed in universities, research centers, and industry.
- International Advisory Board consisting of major venture capitalists and business people was established.





- The Number of Established Companies;17
- The Number of Active Companies; 11 (4 Companies Exit, 2 Companies Closed)
- The Number of The Newly Established Companies in 2010; 5

# QS World University Rankings



# http://www.topuniversities.com/worlduniversityrankings/

### Criteria:

- Research Quality
  (peer review 40% +
  citations per faculty 20%),
- Graduate Employability (recruiter review 10%)
- International Outlook
  (international faculty ratio 5% + international students ratio 5%)
- Teaching Quality (student/faculty ratio 20%)

UNIVERSITY	2008	2009	2010
BILKENT U.	374	360	332
SABANCI U.	400-500	500-600	401-450
KOÇ U.	400-500	400-500	401-450
ISTANBUL U.	400-500	400-500	401-450
ISTANBUL T. U.	376	400-500	451-500
CUKUROVA U.	500+	600+	601+
HACETTEPE U.	500+	600+	601+

