## TASSA ANNUAL CONFERENCE

March 3-4, 2012
University of Maryland, College Park Robert H. Smith School of Business, Van Munching Hall

TURKISH AMERICAN SCIENTISTS AND SCHOLARS ASSOCIATION

Hayatta en hakiki mürşit ilimdir. (Science is the most genuine guide in life.)


## TURKISH AMERICAN SCIENTISTS AND SCHOLARS ASSOCIATION

## a(a)

## 2014 Biennial Conference

University of California, Los Angeles


Please start making your plans to attend the next TASSA Conference.
Program Chair Aydoğan Özcan

TASSA VALUES YOUR PARTICIPATION AND WISHES YOUR PRESENCE ATTHE CONFERENCE

Please contact TASSA with any questions

I 526 I8th Street, N.W.,Washington, DC 20036, USA
Phone:I-855-827-7204 * E-mail: conference@tassausa.org * Web: http://www.tassausa.org

## CONFERENCE COMMTEES

| Program Committee | Organizing Committee |
| :--- | :--- |
| Daron Acemoğlu | Hasan Ayaz |
| Melis Anahtar | Amanda R. Baker |
| Erhan Erkut | Donald Coxe |
| Gökhan S. Hotamışlıgil | Levent Güntay |
| Murat Tarımcllar (Chair) | Tuğba Güntay (Chair) |
|  | Pınar Güvenir |
| Poster Committee | Yalçın Sert |
| Gizem Dönmez | Refik Soyer |
| Ferhat Esen | Candice Ward |
| Daver Kahvecioğlu |  |
| Özgür Kocatürk (Chair) |  |

We appreciate the support of our local crew of volunteers, Smith School IT Department, and the Office of Smith Programs and Events.

## Copyright 2012, TASSA

All rights reserved. No parts of this publication shall be processed/adapted, reproduced, stored in a retrieval system, circulated, re-sold, rent, lent, represented, performed, recorded, transmitted with cord/cordless or any technical, digital and/or electronic devices without prior written permission from the author(s)/right holders subject to Article 52 of Law No. 4110 amended by Law No. 5846 for Intellectual and Artistic Works.

Contents were reproduced from text and presentation materials provided by authors when possible and if made available.

Trade names or manufacturers' names are used in this report for identification only. This usage does not constitute an official endorsement, either expressed or implied, by the Turkish American Scientists and Scholars Association.

Available electronically at: http://www.tassausa.org

Dear Conference Participant,
On behalf of the program and organizing committees, we welcome you to the 2012 TASSA Annual Conference hosted by the University of Maryland's Robert H. Smith School of Business.

The objective of TASSA conferences is to bring Turkish-American scientists and scholars under one roof to exchange ideas and to network. The conferences also provide a sustainable "science bridge" to facilitate the flow of knowledge and technology between the U.S. and Turkey.

The 2012 TASSA annual conference has a science focused first day followed by policy oriented presentations on Sunday. The conference brings together a number of world renowned scholars with young and promising junior colleagues.

We are humbled by the quality of the Turkish American scholars who accepted our invitation to present. We look forward to hearing about their research on topics for which they are considered among the best in the world. We are grateful for all the policy makers and university presidents for taking the time to join us to share their experiences and their vision. We are also honored to have among us Dr. Bruce Alberts and Dean Barry Bloom, two global thought leaders on the role of science in society.

We are excited about the strong interest in the conference shown by the Turkish American community with over 500 registered colleagues. This level of interest encourages us not only for the future of TASSA whose potential and value are undeniable for the Turkish and American societies, but also for the future of science and scholarship at large.

We are grateful to H.E. Namik Tan, Turkish Ambassador to U.S., G. "Anand" Anandalingam, Dean of the Robert H. Smith School of Business, and many organizations and institutions for their support. We also thank many volunteers without whom the conference would not be realized. We hope this forum will provide a platform for scholars to learn about each other and to collaborate further on future projects in the U.S. and Turkey.

Murat Tarımcılar<br>Conference Chair

Haluk Ünal<br>TASSA Acting President

|  | Saturday, March 3, 2012 |
| :---: | :---: |
| 7:30-8:30am | Breakfast and Registration |
| 8:30-8:45am | Conference Greetings |
|  | Murat Tarımcilar, Conference Chair, The George Washington University |
|  | Haluk Ünal, Acting President, TASSA, and Robert H. Smith School of Business |
|  | G. "Anand" Anandalingam, Dean, Robert H. Smith School of Business |
| 8:45-9:00am | Conference Welcoming Address |
|  | H. E. Namık Tan, Ambassador of the Republic of Turkey |
| 9:00-10:00am | Social Sciences \& Humanities |
|  | "The World Our Grandchildren Will Inherit" |
|  | Daron Acemoğlu, MIT |
|  | "Perspectives on the World Economy" |
|  | Kemal Derviş, Brookings Institution |
| 10:00-10:30am | Coffee Break and Poster Session |
| 10:30-11:45am | Life Sciences |
|  | "Advances in Genome Sciences and Applications for Human Health" |
|  | Murat Günel, Yale University |
|  | "Warding off a Deadly Disease: Bioengineering and Clinical Applications of Circulating Tumor Cells" |
|  | Mehmet Toner, Harvard University |
|  | "Gilgamesh to Genghis Khan: Hunting for Treasures in Fat" |
|  | Gökhan Hotamışlgigl, Harvard University |
| 11:45-12:30pm | Plenary Session |
|  | "Science Advice to Government and Society: The Importance of Credible, Independent Sources" |
|  | Bruce Alberts, Professor, Department of Biochemistry and Biophysics, University of California, San Francisco. Editor-in-Chief of Science, United States Science Envoy |


| 12:30-13:15pm | Welcoming Remarks: |  |
| :---: | :---: | :---: |
|  | Lunch |  |
| 13:15-13:45pm | Poster Session |  |
| 13:45-14:45pm | Parallel Sessions |  |
|  | Engineering \& Applied Sciences | Social Sciences |
|  | "Photonics based <br> Telemedicine Technologies toward Smart Global Health Systems" | "Turkey as the Chair of G20 in 2015 - Research Opportunities" <br> Ahmet Faruk Aysan, The Central Bank. of the Republic of Turkey |
|  | Aydoğan Özcan, UCL A <br> "Autonomous Cars and the Future of Driving" | Tuğrul Gurgur, The Central Bank of the Republic of Turkey <br> "Expectations of the Business Community" |
|  | Ümit Özgüner, The Obio State University | Emre Doğru, TUSLAD |
| 14:45-15:00pm | Coffee Break |  |
| 15:00-16:00pm | Young Scientists - Parallel Sessions <br> Discoveries, Decisions, and <br> Engineering Future Energy Systems <br> Destinations: A Discussion Among <br> Young Biomedical Scientists and <br> Bioengineers |  |
|  |  |  |
|  | "Characterizing Protective Mucosal Immune Responses to HIV" | "Computational Intelligence for a Smart Electric Grid" |
|  | Moderator: Melis Anahtar, Harvard University | Moderator: Şeyda Ertekin, MIT |
|  | "Targeting Cancer's Metabolism: <br> Revisiting an Old Phenomenon" <br> Anıl Ağıral, Lawrence Berkeeley National Labs |  |
|  | Kıvanç Birsoy, Whitehead Institute $\quad$ "Applied Photonics for a Sustainable Earth: High |  |
|  | "Molecular Mechanisms of Brain Aging and Neurodegenerative Diseases" | Efficiency Light Emitting Diodes and Solar Cells" |
|  | Gizem Dönmez, Tufts University | Can Bayram, IBM Research Labs |


|  | "A Nanoliter-Scale HIV <br> Neutralization Assay for Single-Cell Screening" <br> Ayça Yalçın Özkumur, MIT | "Electroelastic Dynamical Systems for Energy Harvesting" <br> Alper Ertürk, Georgia Institute of Technology |
| :---: | :---: | :---: |
| 16:00-17:00pm | Coffee Break, Networking, "Meet an <br> Engineering and Natural Sciences <br> Life Sciences <br> Social Sciences and Arts \& Humaniti | iscuss Workshops" |
| 17:00-18:00pm | "Strengthening Science, Techn Turkey and the United States" <br> Davut Kavranoğlu, Deputy Minister, M Jonathan Margolis, Acting Deputy Assi | gy and Innovation Cooperation between <br> sty of Science, Industry, and Technology <br> Secretary, U.S. Department of State |
| 19:30-21:00pm | Reception at the Turkish Embass <br> Hosted by H.E. Ambassador Namık |  |


|  | Sunday, March 4, 2012 |  |
| :---: | :---: | :---: |
| 7:30-8:30am | Breakfast |  |
| 8:00-9:30am | Parallel Sessions |  |
|  | TASSA Business Session $(8: 00-9: 30)$ |  |
| 9:30-10:15am | "Developing Science and Technology in Developing World: Roadblocks and Solutions" |  |
| Conversation with Barry Bloom, Harvard University |  |  |
| Moderated by Gökhan Hotamışlıgil |  |  |
| 10:15-10:30am | Coffee Break |  |


| 10:30-12:30pm | Higher Education Models for Turkey |
| :---: | :---: |
|  | Introductory Remarks: |
|  | Gökhan Çetinsaya, President, Council of Higher Education |
|  | Moderator: |
|  | Erhan Erkut, President, Öryeğin University |
|  | Speakers: |
|  | Üstun Ergüder, Sabana University |
|  | Öktem Vardar, President, TED University |
|  | Panelists: |
|  | Abdullah Atalar, President, Bilkent University |
|  | Mustafa Aydın, President, Kadir Has University |
|  | Murat Barkan, President, Yasar University |
|  | Nilgün Halloran, Vice President, Ankara University |
|  | Ali Güngör, Vice President, Bahssesehir University |
|  | Ümran İnan, President, Koç University |
|  | Kemal Köymen, President, Maltepe University |
|  | Ender Suvacı, Vice President, Anadolu University |
|  | Funda Sivrikaya Şerifoğlu, President, Düzce University |
|  | Derin Ural, Vice President, İstanbul Technical University |
| 12:30-13:30pm | Lunch |
| 13:30-13:45pm | The NeXXt Scholars Initiative |
|  | Sandra J. Laney, Office of the Science \& Technology Adviser to the Secretary (STAS) U.S. Department of State |
| 13:30-15:30 | Information Session: Recent Developments and Accomplishments at Turkish Universities |
|  | Anadolu University, Ankara University, Athlım University, Bahçeșehir University, Bilkent University, Boğaziçi University, Düzce University, İstanbul University, İstanbul Medeniyet University, İstanbul Technical University, Kadir Has University, Koç University, Maltepe University, Özyeğin University, TED University, TOBB University, Yaşar University, Yıldırım Beyazıt University |
|  | Conference Closing Remarks \& Thank you |
| 15:30pm | Job Market |

## HONORARY SPEAKER

Saturday, March 3, 2012<br>8:45-9:00<br>H.E. Namık Tan<br>Ambassador of the Republic of Turkey to the United States

Ambassador Namık Tan was appointed Ambassador of Turkey to the United States in February 2010. Prior to this appointment, Ambassador Tan was Deputy Undersecretary of the Ministry of Foreign Affairs, responsible for bilateral political affairs and public diplomacy. He was previously Ambassador of Turkey to Israel from 2007 to 2009.

Ambassador Tan joined the Turkish Ministry of Foreign Affairs in 1982. After working in the Department of Maritime Affairs, he was posted to Moscow as Second Secretary from 1984 to 1987. He then spent two years as First Secretary in Abu Dhabi. After returning to Turkey, Mr. Tan served as the Deputy Chief of Cabinet to the Turkish President until 1991.

He was later assigned to the Turkish Embassy in Washington, where he served as Counselor from 1991 to 1995 and First Counselor from 1997 to 2001. Between these assignments, Mr. Tan served as Chief of Cabinet to the Turkish Foreign Minister. Upon his return to Turkey in 2001, he first served as Head of the Department for the Americas, and was subsequently named Head of the Information Department in 2002. He went on to serve as the spokesman for the Ministry of Foreign Affairs from 2004 to 2007.

Born in 1956, Ambassador Tan holds a law degree from Ankara University. Ambassador and Mrs. Fügen Tan have two children. Finally, I would like to take this opportunity to commend the distinguished members of the Turkish-American scientific community as well as the leadership of TASSA for their efforts and wish them a successful Conference.

Saturday, March 3, 2012<br>8:45-9:00<br>Message from H.E. Namık Tan<br>for TASSA Annual Conference

Welcome to the Turkish American Scientists and Scholars Association 2012 Annual Conference and to Maryland. Today, Turkish-Americans and Turkish citizens living in this country are an integral part of our strategic partnership with the U.S. They contribute to daily life all over the U.S. as successful business leaders, entrepreneurs, scientists, doctors, educators, artists, athletes, and elected officials. Academia is one of the major fields where the presence of Turkish-Americans and Turkish citizens make a real difference.

TASSA was created with a vision to build a sustainable science bridge between the U.S. and Turkey. This bridge is intended to facilitate the flow of people (scientists and scholars), knowledge and technologies. I am pleased to observe that TASSA provides a dynamic platform for American, Turkish, and Turkish-American scientists and scholars to facilitate cultural exchanges, enhance learning opportunities and to contribute to global scientific achievements. This conference will further help this aim by bringing together the brightest Turkish and American minds and providing unparalleled opportunities to share ideas, collaborate, and make lasting professional and personal connections.

Turkey is among the top 10 places of origin for international students attending universities in the U.S. In the 2010-2011 academic year, over 13000 Turkish citizens were enrolled in U.S. universities - more than all other European countries. Turkey is also among the top 15 countries of origin for international scholars teaching at U.S. universities. Last year, over 2,000 Turkish citizens taught in the U.S. These figures are even higher with the American scholars and students of Turkish origin. The scientists of the Turkish community in the US have much to celebrate. They publish their works at the most prestigious academic journals and teach at best universities across the U.S. Last year, U.S. President Barack Obama honored a Turkish scientist with the Presidential Early Career Award for Scientists and Engineers.

The collaboration that TASSA facilitates is an excellent example of how academic partnerships can strengthen and advance learning, innovation and understanding between different countries and bolster an already strong and multifaceted relationship between the U.S. and Turkey.
It is important that partnerships between countries go beyond political and military alliances and evolve into genuine, mutually beneficial partnerships that are comprised of academic, cultural, economic, and social connections. Let this partnership be an example for all others.

## CONFERENCE GREETINGS

> Saturday, March 3, 2012
> 8:30 - 8:45

Murat Tarımcilar<br>Conference Chair, The George Washington University

Murat Tarımcilar is the Deputy Dean and Dean of Programs and Education at the George Washington University School of Business. He is Professor of Decision Sciences and has been a faculty member at George Washington University since 1999. Prior to assuming his current role he held the positions of Associate Dean for Graduate Programs and Chair of the Decision Sciences Department.

His early research concentrated on production rate optimization and process control models. His current areas of interest include multi-criteria decision models, applications of Operations Research methods in different business settings and Bayesian Decision Analysis. His research has been published in a wide spectrum of policy and business journals such as Management Science, Decision Sciences, OR letters, Socio-economic Planning Journal, Annals of Regional Science, Journal of Real Estate Finance and Economics and The Financial Review.

Dr. Tarımcilar holds an editorial position with INFORMS Transactions on Education.

He teaches courses in Managerial Statistics, Operations Management and Decision Models. He has been the recipient of numerous teaching awards.

Dr. Tarımcılar has extensive consulting experience with a number of private and government organizations. He was the Managing Partner for two years with GST Associates, a consulting company with expertise in business process reengineering and process design. Organizations for which he consulted include Department of Defense, the World Bank, Bose Corporation, Venezuelan Ministry of Health, Turkish Treasury, BSA International.

Dr. Tarımcılar received his Bachelor's degree in Industrial Engineering from Boğaziçi University in Turkey, and Master's and Doctoral Degrees in Quantitative Business Analysis from Louisiana State University.

He currently lives in Bethesda Maryland with his wife and two sons.

Saturday, March 3, 2012<br>8:30-8:45<br>Haluk Ünal<br>Acting President, TASSA, and Robert H. Smith School of Business

Haluk Ünal is a Professor of Finance, at the Robert H. Smith School of Business, University of Maryland, Special Advisor to the Center for Financial Research of the FDIC, and Senior Fellow at the Wharton Financial Institutions Center. He is also the Managing Editor of the Journal of Financial Services Research.

Mr. Ünal holds doctorates in finance from The Ohio State University and in economics from Istanbul University, where he did his undergraduate work as well. Mr. Ünal also earned an MS degree in accounting from Ohio State. He previously taught at Ohio State and The Wharton School of the University of Pennsylvania. He teaches corporate finance, management of financial institutions, and fixed income securities courses.

His current research focuses on executive compensation, corporate bonds, bank mergers, pricing default risk, risk management, and bank resolution costs. He is published in the Journal of Finance, Journal of Financial and Quantitative Analysis, Journal of Financial Services Research, Journal of Money Credit and Banking, Journal of Banking and Finance, Review of Derivatives Research, Journal of Financial Economics and Review of Financial Studies.

Mr. Ünal has been a consultant to the World Bank, Federal Deposit Insurance Corporation, and the Department of Justice. He is also on the academic council of Standard and Poor's. Internationally, he delivered invited lectures in Portugal, China, Italy, Mexico, Peru, Poland, Spain, Switzerland, and Turkey. He also held executive training for Fannie Mae, Hughes Network Systems, Oracle, SAIC, China Merchants Bank, Banco Santander, and Wharton's EMTM program.

Mr. Ünal has been the Acting President of TASSA since 2010.

G. "Anand" Anandalingam<br>Dean, Robert H. Smith School of Business<br>University of Maryland

Anand Anandalingam is the Dean of the Robert H. Smith School of Business at the University of Maryland. The Smith School of Business is ranked as having a top-20 undergraduate program, top-30 MBA program, and top-10 in faculty research in the United States. Smith's world-class programs and research reflect the core values of socially and environmentally responsible organizational stewardship. Among the school's strengths are its strong and highly-respected faculty; its desirable location in the Washington, D.C. metropolitan area; its focus on entrepreneurship; and its established global reach.

A dynamic leader with a strong foundation in academia, Anandalingam has been with the Smith School of Business since 2001. During this time he has served in various key senior leadership positions as senior associate dean and as chair of the Smith School's Decision, Operations and Information Technologies department. He was also responsible for helping to develop Smith's global executive programs, and led the school's effort to revamp and innovate the MBA curriculum. Anand has set up a number of Centers of Excellence at the Smith School including the Center on Financial Policy (CFP), the Center on Social Value Creation (CSVC), Center for Leadership, Innovation and Change (CLIC), the Center for Electronic Markets (now "Digital Thought and Strategy"), and the Center on Health Information and Decision Systems (CHIDS).

Before joining Smith in 2001, Anandalingam was at the University of Pennsylvania for nearly 15 years where he was the National Center Professor of Resource and Technology Management, and a professor in both the Engineering School and the Wharton School. His positions at the University of Pennsylvania included serving as the chair of the Department of Systems Engineering and directing the Executive Master's Program in Technology Management. Anand has published over 100 papers and 4 books. He has received numerous academic and teaching awards while at the Smith School, as well as a variety of scholarships, fellowships, prizes and endowed appointments at Pennsylvania, Harvard and Cambridge. He has been on editorial boards of top-tier journals and has also graduated more than 20 PhD students, many of who have joined top-30 academic institutions.

Anandalingam received his Ph.D. and M.S. from Harvard University, and his B.A. and M.A. from Cambridge University.

Saturday, March 3, 2012<br>9:00-10:00<br>The World Our Grandchildren Will Inherit<br>Daron Acemoğlu<br>Massachusetts Institute of Technology

K. Daron Acemoğlu is Elizabeth and James Killian Professor of Economics in the Department of Economics at the Massachusetts Institute of Technology and a member of the Economic Growth program of the Canadian Institute of Advanced Research. He is also affiliated with the National Bureau Economic Research, the Center for Economic Performance, and the Center for Economic Policy Research. He is an elected fellow of the American Academy of Arts and Sciences, the Econometric Society, the European Economic Association, and the Society of Labor Economists.

Daron Acemoglu has received a BA in economics at the University of York, 1989, M.Sc. in mathematical economics and econometrics at the London School of Economics, 1990, and Ph.D. in economics at the London School of Economics in 1992. Since 1993, he has held the academic positions of Lecturer at the London School of Economics, and Assistant Professor, Pentti Kouri Associate Professor and Professor of Economics at MIT. He is the author of three books, Economic Origins of Dictatorship and Democracy (with James A. Robinson), Introduction to Modern Economic Growth, and Why Nations Fail: The Origins of Power, Prosperity and Poverty (with James A. Robinson). His academic work has been published in leading scholarly journals, including the American Economic Review, Econometrica, Journal of Political Economy, Quarterly Journal Economics and Review of Economic Studies. His research covers a wide range of areas within economics, including political economy, economic development and growth, human capital theory, growth theory, innovation, search theory, network economics and learning.

Daron Acemoglu has received numerous awards and fellowships, including the award for best paper published in the Economic Journal in 1996 for his paper "Consumer Confidence and Rational Expectations: Are Agents' Beliefs Consistent With the Theory?", the inaugural T. W. Shultz Prize from the University of Chicago in 2004, and the inaugural Sherwin Rosen Award for outstanding contribution to labor economics in 2004, Distinguished Science Award from the Turkish Sciences Association in 2006, the John von Neumann Award, Rajk College, Budapest in 2007.

He was also awarded the John Bates Clark Medal in 2005, given every two years to the best economist in the United States under the age of 40 by the American Economic Association, and holds an Honorary Doctorate from the Univers must look ity of Utrecht.

Daron Acemoğlu is also the editor of Econometrica and a coeditor of the National Bureau of Economic Research Macroeconomic Annual.

Saturday, March 3, 2012<br>9:00-10:00<br>Perspectives on the World Economy<br>Kemal Derviş<br>Brookings Institution

Kemal Derviş is Vice President and Director of the Global Economy and Development Program at the Brookings Institution.

Until February 2009, he was the Executive Head of the United Nations Development Programme and Chair of the United Nations Development Group. In 2001-2002, as Minister of Economic Affairs and the Treasury of Turkey, Derviș was responsible for launching Turkey's successful recovery from a devastating financial crisis. Derviş is also a Member of the Board of Overseers of Sabanci University in Istanbul and will contribute to the work of that university.

Prior to his tenure as Minister of Economic Affairs, Derviş had a 22 -year career at the World Bank, where he served as Vice President for the Middle East and North Africa and Vice President for Poverty Reduction and Economic Management. From the end of 2002 to the summer of 2005, Derviş was a member of the Turkish Parliament representing his native city of Istanbul.

Derviş earned his Bachelor and Master's degrees in economics from the London School of Economics, and his Ph.D. from Princeton University.

Saturday, March 3, 2012<br>10:30-11:45<br>Advances in Genome Sciences and Applications for Human Health<br>Murat Günel<br>Yale University

Murat Günel was born on November 17, 1967 in Ankara, Turkey. He was raised in Ankara and later in Istanbul where he earned his M.D. from the Istanbul School of Medicine. He then came to Yale as an intern in 1991 and completed his residency in the Department of Neurosurgery at the Yale School of Medicine, joining the School of Medicine faculty in 1998. He was named the Nixdorff-German Professor of neurological surgery in 2009 and currently serves as Professor of Neurosurgery and Professor of Genetics and of Neurobiology, Director of the Yale Program in Brain Tumor Research and Co-Director of the Yale Program on Neurogenetics.

Dr. Günel specializes in the microsurgery of complex intracranial pathologies, including cerebral aneurysms, vascular malformations and tumors. His research parallels his clinical interest and focuses on gene discovery in disorders of the development and pathology of the brain and its vasculature. Dr. Günel is currently leading a large scale effort aimed at the identification of the genomic architecture of brain tumors, specifically focusing on the most malignant form, glioblastoma multiforme (GBM). In addition, he is a world-renowned expert on the molecular genetics of intracranial aneurysms and cavernous malformations, leading an international team spanning across 10 countries and 32 institutions. Their collaborative effort has led to the identification of six chromosomal segments where common genetic variations can create risk for cerebral aneurysms. Finally, through the study of a unique collection of nearly 2,000 index cases suffering from recessive forms of brain malformations or neurodegenerative disorders (mainly recruited from Turkey), he has focused on the discovery of novel genes fundamental in brain development. Dr. Günel's work has continuously been funded by the NIH since 2004. He currently is the recipient of a RC2 and three RO1 grants.

Dr. Günel has received numerous honors for his work, including Yale's Ohse Research Award, a National Pfizer Scholar Award for New Faculty, a Young Investigator Award from the American Epilepsy Society, as well as honorary master and doctoral degrees from Yale and Bahcesehir Universities, respectively. He was honored by Science magazine as a runner-up for the " 10 biggest scientific breakthroughs of 2010" for the discovery of mutations in a novel gene, WDR62, that cause severe developmental brain malformations.

Dr. Günel is the past Chair of the American Association \& Congress of Neurological Surgeons Cerebrovascular Section and also serves as a member of the Board of the Foundation of International Education in Neurological Surgery. Dr. Günel has also participated as a member of the Stroke Council of the American Heart Association and as president of the Turkish American Medical Association. He is a Fellow of the American Heart Association and American College of Surgeons.

Saturday, March 3, 2012<br>10:30-11:45<br>Warding off a Deadly Disease: Bioengineering and Clinical Applications of Circulating Tumor Cells Mehmet Toner<br>Harvard University

Dr. Toner received BS degree from Istanbul Technical University and MS degree from the Massachusetts Institute of Technology (MIT), both in Mechanical Engineering. Subsequently he completed his PhD degree in Medical Engineering at Harvard-MIT Division of Health Sciences and Technology in 1989. Since that time he has been on the faculty at Harvard Medical School. He was appointed as an assistant professor in 1990, promoted to associate professor in 1996, and to professor in 2002. Currently, he is the Helen Andrus Benedict Professor of Biomedical Engineering at the Massachusetts General Hospital, Harvard Medical School, and Harvard-MIT Division of Health Sciences and Technology. Dr. Toner established the Center for Engineering in Medicine, and BioMicroElectroMechanical Systems Resource Center (BMRC) at the MGH to explore the applications of bioengineering in basic biology, systems biology, diagnostics and clinical medicine. He is internationally regarded for his work in biomedical engineering. Dr. Toner has published $>250$ original papers in archival journals, including wide spectrum of high impact journals such as Nature, Science, New England Journal of Medicine, Science Translational Medicine, Nature Biotechnology, and PNAS. He has also delivered about 400 invited, keynote and plenary presentations. Most recently, he was the Commencement Speaker at his alma mater Istanbul Technical University's 238th anniversary.

In 1994, he was recognized by the "YC Fung Faculty Award" in Bioengineering. In 1995, he received the "Whitaker Foundation Special Opportunity Award." In 1998, Dr Toner was selected to become a "Fellow of the American Institute of Medical and Biological Engineering." In 2007, he became a "Fellow of the American Society of Mechanical Engineers." In 2008, he was given "Oneof-the hundred" award by the Massachusetts General Hospital cancer Center for his impact in cancer research. He was also recognized by the magazine "Popular Mechanics" as one of the top ten inventors in 2008. In 2010, he received the American Association of Cancer Research (AACR) Team Award.

Dr. Toner has served on many national and international panels and review boards. He is a member of the Board of Trustees of Özyeğin University, and a member of the President's Council of Olin College of Engineering. In 2010, he was selected to serve a three-year term on the NSF Directorate of Engineering, Board of Advisors. Dr. Toner serves on the scientific advisory board of Tissue Engineering Research Center at Tufts University/MIT/Columbia University; Resource for Synthesis and Bulk Characterization of Polymer Biomaterials at Rutgers University; Institute of Engineering and Medicine at University of Minnesota; Center for Biomedical Engineering at University of North Carolina at Charlotte; and Center for Biomedical Engineering at Brown University. Dr. Toner is also on the editorial board of various technical and scientific journals including Journal of Biomechanical Engineering, Cryo-Letters, Cryobiology (Associate Editor), Cell Preservation Technologies (Associate Editor), Nanomedicine, Integrated Biology, Nanolife, and Annual Review of Biomedical Engineering (Associate Editor and Co-Founder).

Saturday, March 3, 2012<br>10:30-11:45<br>Gilgamesh to Genghis Khan: Hunting for Treasures in Fat<br>Gökhan Hotamışlgil<br>Harvard University

Dr. Hotamissligil's research efforts focus on the genetic basis of common and complex diseases, articularly obesity, diabetes, and heart disease. His research examines the molecular mechanisms of nutrient sensing and response pathways as they relate to physiological metabolic homeostasis. He is an internationally recognized leader with many seminal contributions including the discoveries leading to the field of immunometabolism, discovery of novel lipid hormones and their biological functions, and endoplasmic reticulum as a key organelle regulating whole body metabolism. These studies have led to many drug discovery and development programs in academia and industry several currently approaching human testing. Dr. Hotamisligil continues to be active in these areas while pursuing new interdisciplinary paths as he aims to develop novel preventive and therapeutic strategies against chronic metabolic diseases. He has produced $>150$ papers which have received $>25,000$ citations and resulted in $>10$ patents.

Dr. Hotamışlgil has been recognized with many fellowships and awards from the Markey, Pew, and Sandler Foundations, the American Diabetes Association, the National Institutes of Health and the J.S. Simmons Endowment at Harvard University. He's an elected permanent member of the Turkish Academy of Sciences (TÜBA) and the recipient of the 2004 Science Award from TÜBITAK. He was recently elected as a fellow of the AAAS. He is the recipient of the Outstanding Scientific Accomplishment Award of the American Diabetes Association, Wertheimer Award from the International Association for the Study of Obesity, and the Naomi Berrie Award from Columbia University. He has trained many students and fellows who now hold independent positions in leading Universities and Industry groups around the world and his commitment to training has been recognized by the Harvard School of Public Health Mentoring Award. He teaches two graduate courses and lectures in both graduate and undergraduate classes, has delivered $>300$ lectures including the Kroc, the Havel, the Charles Hollenberg Memorial, the McGarry Memorial, and the Laguna Memorial Lectures and Medal and many others in the past few years. He also lectures for $5^{\text {th }}$ and $10^{\text {th }}$ grade students. He is a member of the editorial boards of Cell Metabolism, Science Translational Medicine, Journal of Clinical Investigation, EMBO Molecular Medicine, Diabetes, Journal of Lipid Research, Journal of Molecular Medicine, Turkish Journal of Biochemistry and Turkish Journal of Medicine. Other services include the chair of the Juvenile Diabetes Research Foundation Metabolic Control Program, Founder and Board Member of Syndexa Pharmaceuticals and Lipomics Inc., Harvard-Pfizer Joint Steering Committee, Appointments and Promotions, Intellectual Property, and Conflict of Interest Committees and Jury membership for NY Academy of Sciences, Blavatnik, Kadir Has, and Sedat Simavi Awards and TASSA organizing committees. Dr. Hotamışlgil also organizes and hosts Boston Turkish Biology Colloquium together with three fellows and has been recognized through the Golden Turk and Society Leader Awards by the Turkish-American community.

Saturday, March 3, 2012<br>11:45-12:30<br>Science Advice to Government and Society:<br>The Importance of Credible, Independent Sources<br>Bruce Alberts<br>University of California, San Francisco

Bruce Alberts, a prominent biochemist with a strong commitment to the improvement of science and mathematics education, serves as Editor-in-Chief of Science and as one of President Obama's first three Science Envoys. Alberts is also Professor Emeritus in the Department of Biochemistry and Biophysics at the University of California, San Francisco, to which he returned after serving two six-year terms as the president of the National Academy of Sciences (NAS).

During his tenure at the NAS, Alberts was instrumental in developing the landmark National Science Education standards that have been implemented in school systems nationwide. The type of "science as inquiry" teaching we need, says Alberts, emphasizes "logical, hands-on problem solving, and it insists on having evidence for claims that can be confirmed by others. It requires work in cooperative groups, where those with different types of talents can discover them - developing self-confidence and an ability to communicate effectively with others."

Alberts is also noted as one of the original authors of The Molecular Biology of the Cell, a preeminent textbook in the field now in its fifth edition. For the period 2000 to 2009 , he served as the co-chair of the InterAcademy Council, a new organization in Amsterdam governed by the presidents of 15 national academies of sciences and that was established to provide scientific advice to the world.
Committed in his international work to the promotion of the "creativity, openness and tolerance that are inherent to science," Alberts believes that "scientists all around the world must now band together to help create more rational, scientifically-based societies that find dogmatism intolerable."

Widely recognized for his work in the fields of biochemistry and molecular biology, Alberts has earned many honors and awards, including 16 honorary degrees. He currently serves on the advisory boards of more than 25 non-profit institutions, including the Gordon and Betty Moore Foundation.

> Saturday, March 3, 2012
> 11:45 - 12:30
> Wallace D. Loh
> University of Maryland

Wallace D. Loh became the $33^{\text {rd }}$ president of the University of Maryland in November 2010. He is responsible for providing leadership to the university's 37,000 students, 12 colleges and schools, and 9,000 members of the faculty and staff, as well as overseeing its $\$ 1.7$ billion budget.

Dr. Loh's priorities include strengthening educational excellence by emphasizing student opportunity and achievement, expanding innovation and entrepreneurship to make the university a major catalyst for economic vitality in the region and the nation; internationalizing the university by bringing the world to the campus and projecting the campus to the world; and public service values.

Prior to coming to Maryland, Dr. Loh served as executive vice president and provost at the University of Iowa. Previously, he served as director of executive policy and chief policy adviser to Governor Gary Locke of the State of Washington (now the U.S. Ambassador to China); law professor at various schools, including the University of Washington (where he was dean of the Law School), Cornell University, Vanderbilt University, University of Texas, and Beijing University in China. Dr. Loh’s specialty is criminal justice and the uses of social research in the legal process. He was elected president of the Association of American Law Schools, the learned society of the academic legal profession.

Born in Shanghai, China, he moved with his family to Lima, Peru. After graduating from high school, he immigrated alone to the U.S. and became a naturalized citizen. He holds a J.D. from Yale Law School, a Ph.D. from the University of Michigan, an M.A. from Cornell University, and a B.A. from Grinnell College. He received honorary degrees from Grinnell College, Iowa Wesleyan College, and Montgomery College. He received the "Immigrant Achievement Award, from the American Immigration Council and the "Trailblazer Award" from the National Asian Pacific-American Bar Association.

Saturday, March 3, 2012<br>13:45-14:45<br>Photonics based Telemedicine Technologies toward Smart Global Health Systems Aydoğan Özcan<br>University of California, Los Angeles

Dr. Aydoğan Özcan received his Ph.D. degree at Stanford University Electrical Engineering Department in 2005. After a short post-doctoral fellowship at Stanford University, he is appointed as a Research Faculty Member at Harvard Medical School, Wellman Center for Photomedicine in 2006. Dr. Ozcan joined UCLA in the summer of 2007, where he is currently an Associate Professor leading the Bio- and Nano-Photonics Laboratory at the Electrical Engineering and Bioengineering Departments. Dr. Özcan holds 17 issued patents and another 12 pending patent applications for his inventions in nanoscopy, wide-field imaging, lensless imaging, nonlinear optics, fiber optics, and optical coherence tomography. Dr. Ozcan is also the author of one book and the co-author of more than 210 peer reviewed research articles in major scientific journals and conferences. In addition, Dr. Ozcan is the founder and a member of the Board of Directors of Holomic LLC, and is a member of the program committee of SPIE Pbotomics West Conference, SPIE International Symposium on Defense, Security and Sensing, as well as the IEEE Pbotonics Society Annual Meeting. He also serves as a panelist and a reviewer for National Science Foundation, NIH and for Harvard-MIT Innovative Technology for Medicine Program. Prof. Ozcan also served as the General co-Chair of 2010 IEEE Winter Topical Meeting on Advanced Imaging in BioPhotonics.

Prof. Özcan received several major awards including the 2011 Presidential Early Career Award for Scientists and Engineers (PECASE), which is the highest honor bestowed by the United States government on science and engineering professionals in the early stages of their independent research careers. Dr. Özcan received this prestigious award for developing innovative optical technologies and signal processing approaches that have the potential to make a significant impact in biological science and medicine; addressing public health needs in less developed countries; and service to the optical science community including mentoring and support for underserved minority undergraduate and graduate students. Furthermore, Dr. Ozcan also received the 2011 SPIE Early Career Achievement Award, the 2011 Army Research Office (ARO) Young Investigator Award, the 2010 NSF CAREER Award, the 2009 NIH Director's New Innovator Award, the 2009 Office of Naval Research (ONR) Young Investigator Award, the 2009 IEEE Photonics Society (LEOS) Young Investigator Award and the MIT's Technology Review TR35 Award for his seminal contributions to near-field and on-chip imaging, and telemedicine based diagnostics.

Prof. Özcan was also selected as one of the top 10 innovators by the U.S. Department of State, USAID, NASA, and NIKE as part of the LAUNCH: Health Forum organized in October 2010.

Saturday, March 3, 2012 13:45-14:45<br>Autonomous Cars and the Future of Driving<br>Ümit Özgüner<br>The Ohio State University

Ümit Özgüner received his Ph.D. from the University of Illinois and held positions at I.B.M. Research Labs, University of Toronto and Istanbul Technical University. He has been with the Ohio State University since 1981 where he is Professor of Electrical and Computer Engineering and holds the TRC Inc. Chair on Intelligent Transportation Systems (ITS). He has spent sabbaticals at NASA Langley, Ford Motor Co. and Istanbul Technical University.

He is a Fellow of the Institute of Electrical and Electronic Engineers.
His areas of research interest are in ITS, decentralized control and autonomy in large systems and is the author or co-author of over 400 publications including a 2011 book on Autonomous Ground Vehicles. He has advised over 40 students in their MS and over 25 students in their PhD research.

He was the first President of the IEEE ITS Council in 1999 as it transformed into The IEEE ITS Society. He has also been the ITS Society VP for Conferences. Professor Ozguner has also served the IEEE Control Society in various positions. He participated in the organization of many conferences and been the Program Chair of the first IEEE ITS Conference and the General Chair of the IEEE Control Systems Society 2002 CDC, ITS Society IV 2003 and ICVES 2008.

Teams he coordinated participated successfully in the 1997 Automated Highway System Technology Demonstration, the DARPA 2004 and 2005 Grand Challenges, the DARPA 2007 Urban Challenge and the 2010 Multi Autonomous Ground-robotic International Challenge (MAGIC 2010) co-sponsored by TARDEC. The last was in collaboration with and as part of a consortium team led by ASELSAN. He has consulted with Okan University in Turkey as they developed a fully autonomous car and also participated in the Grand Cooperative Driving Challenge as part of the team Mekar involving students and faculty from Okan University, Istanbul Technical University and OSU.

Prof. Özgüner's research has been supported by many industrial companies including Ford, GM, Honda and ASELSAN; and organizations like NSF, AFOSR, NASA and AFWAL.

> Saturday, March 3, 2012
> 13:45-14:45

Turkey as the Chair of G20 in 2015 - Research Opportunities

Ahmet Faruk Aysan<br>The Central Bank of the Republic of Turkey

Dr. Ahmet Faruk Aysan, Board and Monetary Policy Committee Member. Born in Izmir in 1977, Mr. Aysan received his B.A. in economics from the Bogaziçi University in 1999 and both his M.A. (2001) and his Ph.D. (2005) in economics from the University of Maryland College Park. He became an Associate Professor in 2008. Dr. Aysan, who served as a consultant at various institutions such as the World Bank, the Central Bank of the Republic of Turkey and Oxford Analytica, has been lecturing at the Department of Economics at Bogaziçi University since 2005.

Currently, Dr. Aysan is the Deputy Director of the Center for Economics and Econometrics at Bogaziçi University, a member of the G-20 Financial Safety Net Experts Group, a member of the Advisory Board of Social Sciences and Humanities Research Group of TÜBITAK, and a National Expert in 'Socio-Economic Sciences and Humanities' under the Seventh Framework Programme of the European Union. Dr. Aysan's fields of specialization are international finance, macroeconomics, political economy, banking and finance, econometrics, governance and development and he is a member of editorial and advisory boards of several international journals.

Dr. Aysan, who has many articles published in academic journals, was awarded with the Bogaziçi University Foundation Publication Awards; Bogaziçi University Foundation Academic Promotion Awards and the Ibn Khaldun Prize for the best paper on the North African and Middle Eastern Country Studies granted by Middle East Economic Association.

## Tuğrul Gurgur

The Central Bank of the Republic of Turkey

Tuğrul Gurgur is a Deputy Executive Director at Markets Department, Central Bank of the Republic of Turkey. He joined the Bank in 2007 as an economist at Research and Monetary Policy Department. He served as a Director and later as a Deputy Executive Director at Communications and International Relations Department. He was the spokesperson of the Bank between 2010 and 2011. He received his Ph.D. in economics from the University of Maryland, College Park in 2005. His previous work experience includes the World Bank and the Centre for Institutional Reform and the Informal Sector.

Saturday, March 3, 2012<br>13:45-14:45<br>Expectations of the Business Community<br>Emre Doğru<br>TUSIAD

Mr. Emre Doğru is TUSIAD's (Turkish Industry \& Business Association) U.S. Representative since January 2012. Prior to this role, Mr. Doğru worked as a Middle East analyst for Stratfor based in Istanbul, Turkey and Austin, Texas. Between 2006 and 2008, Mr. Doğru served at United Nations Development Program and Turkish Permanent Representative to NATO. Mr. Doğru received a BA degree in international relations from Ankara University, Faculty of Political Science as well as Université Libre de Bruxelles. He received an MA degree in European studies from Institut européen's trilingual branch and currently pursues a PhD degree in international relations and political science at Koc University, Istanbul. Mr. Doğru is fluent in English and French in addition to his colloquial German.

## Characterizing Protective Mucosal Immune Responses to HIV <br> Melis Anahtar <br> Harvard University

Melis Anahtar is a third-year M.D.-Ph.D. student at Harvard University with an interest in elucidating immunological mechanisms through the development and application of novel technologies. She is currently pursuing a doctorate in immunology at the Ragon Institute of MGH, MIT, and Harvard on a Soros fellowship, and is focusing on understanding human mucosal immune responses to HIV. She previously completed an M.Sc in Integrated Immunology from Oxford University on a Rhodes Scholarship in 2009, and an S.B. in Mechanical Engineering with a minor in Biomedical Engineering from MIT in 2008. Her research on HIV, nanoparticles for tumor imaging, and diagnostic microfluidic devices have resulted in three co-authored papers in peer-reviewed scientific journals, five scientific papers as a first author in MIT publications, and numerous presentations at scientific meetings, symposia and conferences.

## Targeting Cancer's Metabolism: Revisiting an Old Phenomenon Kıvanç Birsoy <br> Whitehead Institute

Kivanc Birsoy received B.S.(2004) degree in Molecular Biology and Genetics from Bilkent University, where he graduated at the top of his class. Subsequently he earned his PhD.(2009) at the Rockefeller University as a David Rockefeller Graduate Fellow, working with Dr Jeffrey M. Friedman, discoverer of obesity hormone-leptin. At Rockefeller, he has developed genetic tools and mouse models to study fat tissue development and regeneration. He currently works as an Anne Fuller Postdoctoral Fellow jointly at Whitehead Institute and Broad Institute of Harvard and MIT, in the lab of Dr David M. Sabatini. His major focus is to develop and utilize high-throughput screening platforms to study how nutrients/diet affect tumor growth. His work is published in a number of scientific journals including Cell, Nature, PNAS, Cell Metabolism and Development. He is a recipient of Jane Coffin Childs Foundation Medical Fund, Damon Runyon Cancer Foundation and UMDF award.

Saturday, March 3, 2012
15:00-16:00

# Molecular Mechanisms of Brain Aging and Neurodegenerative Diseases 

Gizem Dönmez
Tufts University
Dr. Dönmez is currently Assistant Professor at the Department of Neuroscience at Tufts University School of Medicine. Her expertise is in molecular mechanisms of brain aging and neurodegenerative diseases. She earned her B.S. degree from the Department of Molecular Biology and Genetics from Middle East Technical University, Turkey. She received her M.Sc and PhD from International $\mathrm{Msc} / \mathrm{PhD}$ program in Molecular Biology (International Max-Planck Research School) at Max-Planck Institute for Biophysical Chemistry in Gottingen, Germany. Her thesis work is on mRNA splicing, RNA Biochemistry and molecular biology. She then moved to MIT for postdoctoral studies and discovered the protective role Sirtuin 1 protein on Alzheimer's and Parkinson's Diseases. Dr. Donmez contributed to our understanding of brain aging and neurodegenerative diseases. Her investigations and findings have been awarded and granted by various institutions and she has been the recipient of numerous awards and scholarships, including American Parkinson's Disease Association, Johnson and Johnson, Max-Planck Society, Sabanci Group Holding and Turkey Scientific and Technical Research Corporation (TUBITAK). She recently received the Young Investigator Award from Turkish Inventor Businessman Society. Her studies on Alzheimer's Disease received press reviews in several news media including Cell, The New York Times, Wall Street Journal, Boston Globe, Science Daily, and several others.

> A Nanoliter-Scale HIV Neutralization Assay for Single-Cell Screening Ayça Yalçın Özkumur, Massachusetts Institute of Technology

Ayça Yalçın Özkumur is a Postdoctoral Research Associate in the Chemical Engineering Department at Massachusetts Institute of Technology. Dr. Yalçın Özkumur received the B.S. degree in electrical and electronics engineering from Bilkent University, Ankara, Turkey, in 2003, and the M.S in photonics and Ph.D. in electrical and computer engineering from the Boston University in 2005 and 2009, respectively. Dr. Yalçın Özkumur's career interests are research and development of high-throughput and highcontent measurement techniques for single-cell analyses, and novel optical detection methodologies for biosensing, metrology, and medicine. She is a member of the IEEE Photonics Society and serves in IEEE Biophotonics Committee.

> Saturday, March 3, 2012
> 15:00 - 16:00
> Computational Intelligence for a Smart Electric Grid Şeyda Ertekin
> Massachusetts Institute of Technology

Dr. Şeyda Ertekin is a postdoctoral research associate at the MIT Sloan School of Management in Massachusetts Institute of Technology. She received the BSc degree in Electrical and Electronics Engineering from Orta Dogu Teknik Universitesi (ODTU), the MSc degree in Computer Science from the University of Louisiana at Lafayette. Then she received her Ph.D. in Computer Science and Engineering (CSE) from the Pennsylvania State University-University Park in 2009 where her doctoral dissertation was nominated by the CSE department for the prestigious Alumni Association Dissertation Award at Penn State. Her expertise is on designing efficient and scalable machine learning algorithms for large scale data. At Penn State, she also took part in the development and advancement of CiteSeer, the first public search engine and digital library for scientific and academic papers. Her current research at MIT Sloan bridges theoretical and experimental computer science in an effort to develop new machine learning algorithms for the analysis of large scale data for industrial problems. Her specific application areas include electrical systems and crowdsourcing systems. She had worked at Aselsan, Inc. in Ankara, Turkey as an R\&D engineer, and at NEC Research Labs in Princeton, New Jersey as a research scientist. She has also worked as a consultant to several companies in the US on the design of data mining infrastructures and algorithms. She is the author of a book on machine learning and also high impact publications in leading journals and conferences of computer science. She is an MIT Energy Initiative Fellow and an MIT Intelligence Initiative Fellow. She is also the recipient of numerous awards and honors from ACM, NSF and Google.

> Turning Sunlight into Clean Fuels
> Anıl Ağıral
> Lawrence Berkeley National Labs

Dr. Anıl Ağıral, a native of Ordu, Turkey, received his B.Sc. and M.Sc. in Chemistry from Bilkent University in 2003 and 2005, respectively. He earned his doctorate in Chemical Engineering in 2009 at Twente University in The Netherlands. Ağıral then worked for a year at the Energy Laboratory of Tokyo Institute of Technology in Japan with Ken Okazaki. In 2010 he joined the Lawrence Berkeley National Laboratory in California as a postdoctoral researcher. Ağıral is an expert in alternative activation mechanisms (electrical field, light) for chemical process control and process intensification. Applications of his research can be found in the development of methods to store solar energy in the form of renewable transportation fuel. He has published numerous papers, book chapters and a patent and he is the recipient of Rubicon Prize by Netherlands Organization for Scientific Research and Certificate of Merit Award by American Chemical Society.

> Saturday, March 3, 2012
> 15:00 - 16:00

Applied Photonics for a Sustainable Earth: High Efficiency Light Emitting Diodes and Solar Cells Can Bayram<br>IBM Research Labs


#### Abstract

Dr. Can Bayram is currently working as a Research Scientist at IBM Thomas J. Watson Research Center, Yorktown Heights, NY, USA. He is an expert in solid state and photonics. His research interests focus on III-V materials and devices. He is mainly involved in the development of high efficiency III-V solar cells, III-N light emitting diodes, and novel growth and fabrication technologies. He received the Ph.D. degree in Electrical Engineering and Computer Science with a focus on Solid State and Photonics at Northwestern University, IL, USA (Faculty Advisor: Prof. Manijeh Razeghi), and B.S. degree in Electrical Engineering from Bilkent University, Ankara, Turkey (Senior Project Advisor: Prof. Abdullah Atalar). He is the recipient of most distinguished world-wide awards including Engineer of the Year (awarded by Boeing Company), Sustainability Innovator (awarded by Dow Chemical Company), and PhD Fellowships (awarded by International Business Machines (IBM) cooperation and Link Foundation). He is also the awardee of the top recognitions from IEEE, SPIE, and ICDD societies. He has (co-)authored 27 high-impact journal papers and made 55 total scientific contributions. He is a reviewer of high impact journals including Applied Physics Letters and Optics Express, and a member of the IEEE, SPIE, OSA, MRS, APS, AAAS, ECS, IOP, ICDD and ACS.


## Electroelastic Dynamical Systems for Energy Harvesting <br> Alper Ertürk <br> Georgia Institute of Technology

Dr. Alper Ertürk is an Assistant Professor of Mechanical Engineering at Georgia Institute of Technology. His research background covers various topics in structural dynamics, mechanical vibrations, smart structures, and electromechanical systems. Over the past five years, he has published more than 70 articles on dynamical systems and smart structures in refereed international journals and conference proceedings, and a book titled Piezoelectric Energy Harvesting. He is an elected member of the ASME Technical Committee on Adaptive Structures and Material Systems under the Aerospace Division and the ASME Technical Committee on Vibration and Sound under the Design Engineering Division, and also a member of the following professional societies: ASME, AIAA, IEEE, SPIE, and SEM. Dr. Ertürk received his Ph.D. in Engineering Mechanics from Virginia Tech in 2009; M.S. and B.S. in Mechanical Engineering from the Middle East Technical University, Ankara, Turkey, in 2006 and 2004, respectively.

Strengthening Science, Technology and Innovation Cooperation between Turkey and the United States

> Davut Kavranoğlu, Deputy Minister, Ministry of Science, Industry, and Technology, Republic of Turkey

The Honorable Professor Kavranoğlu is the first Deputy Minister appointed to the position after it was inaugurated in the newly founded Turkish Ministry of Science, Industry and Technology in June 2011. Prior to the appointment, Prof. Kavranoğlu was a Professor of Computer Engineering at the University of Yalova, Turkey. After graduating with a cum laude from Istanbul Technical University in 1984, Professor Kavranoğlu went on to obtain MSc (1986) and PhD degrees from the Department of Electrical Engineering, California Institute of Technology, USA (1989). He held faculty positions and lectured at King Fahd University of Petroleum and Minerals in Saudi Arabia, at Istanbul Commerce University in Turkey, and served as a visiting professor at California Institute of Technology. In addition to publishing numerous research articles in prestigious academic journals, Professor Kavranoğlu started and successfully managed IT companies that developed mobile and satellite communication, GPS and Internet technologies.

Professor Kavranoğlu is married and has seven children.

> Saturday, March 3, 2012
> 17:00 - 18:00

Strengthening Science, Technology and Innovation Cooperation between Turkey and the United States Jonathan Margolis,
Acting Deputy Assistant Secretary, U.S. Department of State

Jonathan Margolis, a career member of the Senior Executive Service, serves as Acting Deputy Assistant Secretary for Science, Space and Health in the Department of State's Bureau of Oceans and International Environmental and Scientific Affairs. In this position, he is responsible for policies and programs in the areas of International Science \& Technology Cooperation, Space \& Advanced Technologies, and International Health and Biodefense. From 2007-2011, Mr. Margolis served as Deputy Assistant Secretary for Global Communications in the Bureau of International Information Programs.
Mr. Margolis oversaw the Bureau's internet, video and print products, including social media. His team's programs reached and engaged hundreds of millions of people both directly and through decentralized operations on $250+$ sites in virtually every country in the world. From 2006-2007, Mr. Margolis served as the Senior Coordinator for Global and Functional Issues in the Office of the Director of Foreign Assistance, where he oversaw reform efforts to ensure effective use of foreign assistance resources, through strategic planning and transparent performance measures. His team was responsible for programs with an annual budget of $\$ 6.5$ billion, dispersed through 14 bureaus and over 100+ U.S. missions.From 1997-2006, Mr. Margolis served as the Department's Special Representative for Sustainable Development and as the Director of the Office of Policy Coordination and Initiatives in the Bureau of Oceans and International Environmental and Scientific Affairs. As Special Representative, he headed the U.S. Delegation to the UN Commission on Sustainable Development. He also served as a member of international science and technology boards and sustainability partnerships.
Mr. Margolis joined the Department in 1991 as an American Association for Advancement of Science Diplomacy Fellow and was integrally involved in environment, water, and economic issues and programs, as part of the multilateral track of the Middle East peace process through 1996. During that time he also served as the Division Chief for the Middle East and Asia in the Office of Science and Technology Cooperation.
Mr. Margolis has a Ph.D. from Harvard University in psychology, focusing on negotiation and conflict resolution. He holds a Master's Degree from the Fletcher School of International Law and Diplomacy, and his undergraduate degree is in Fine Arts from Harvard College. He has also served as an Adjunct Professor at American University, and the Foreign Service Institute, where he has conducted courses on environmental policy, negotiations, and international organizations.

Sunday, March 4, 2012
8:30-9:30

Immigration Law Workshop<br>U.S. Visa Strategies: Challenges and Opportunities

Çiğdem A. Acar<br>Acar Law Firm

Çiğdem A. Acar, Esq., Managing Attorney at the Acar Law Firm PLLC, counsels clients in all areas of U.S. immigration law including foreign trade and investment. Her academic credentials include a J.D. degree (Fordham University School of Law), M.A. in Sociology (New School for Social Research) and B.A. in Economics (New York University). She served as Chair of the Immigration Law Committee of the N.Y. Women's Bar Association, and is a former member of the boards of the American Turkish Society, Turkish-American Chamber of Commerce and the Belgian-American Chamber of Commerce. She currently serves on the board of the Turkish-American Business Forum. Ms. Acar is a frequent speaker at international seminars including, Turkish-American Business Partnership Program, coorganized by the Union of Chambers and Commodity Exchanges of Turkey (TOBB) and the U.S. Chamber of Commerce; the Foreign Economic Relations Board (DEIK), Konya Chamber of Industry, Ankara Chamber of Industry, Aegean Region Chamber of Industry and Izmir Chamber of Commerce. Ms. Acar was also invited as a guest speaker to the Mugla Chamber of Commerce's 15th Annual Meeting hosted by Milas Chamber of Commerce, as well as to the Mardin Chamber of Commerce and Bodrum Chamber Of Commerce, under the leadership of the Turkish American Business Association (TABA/AMCham). Most recently, Ms. Acar participated in the American Committee Visit to Turkey Program co-organized by TABA/AmCham.

Çiğdem A. Acar is also the Founder and President of a N.Y. non-profit organization, Bridges of Hope Project, established to support educational projects in Turkey. (www.BOHP.org) (http://BOHP.org/why) BOHP creates elementary school libraries, provides educational resources, and facilitates the mentoring of girls. To date, BOHP has established 66 libraries built in the rural regions of Turkey impacting over 20,000 students.

# Developing Science and Technology in Developing World: Roadblocks and Solutions 

Barry Bloom<br>Harvard University

Dr. Barry Bloom is Harvard University's Distinguished Service Professor of the Department of Immunology and Infectious Diseases and Former Dean of the Harvard School of Public Health. He received a bachelor's degree and an honorary ScD from Amherst College, and a PhD from Rockefeller University.

Dr. Bloom is widely recognized for his work in the area of infectious diseases, vaccines, and global health. He served as a consultant to the White House on International Health Policy from 1977 to 1978, was elected President of the American Association of Immunologists, and served as President of the Federation of American Societies for Experimental Biology. Bloom was an Investigator at the Howard Hughes Medical Institute. He has received numerous awards for his scientific work including the first Bristol-Myers Award in Infectious Diseases, Robert Koch Gold Medal, and the Novartis Award in Immunology.

He has been extensively involved with the World Health Organization (WHO) for more than 40 years. He was a member of the WHO Advisory Committee on Health Research and chaired the WHO Committees on Leprosy Research and Tuberculosis Research, and chaired the Scientific and Technical Advisory Committee of the UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases. He as served on the National Advisory Councils of the U.S. National Institute of Allergy and Infectious Diseases, NIH, and the Center for Infectious Diseases, of the CDC. He is a member of the U.S. National Academy of Sciences, the Institute of Medicine, the American Academy of Arts and Sciences and the American Philosophical Society.

Sunday, March 4, 2012<br>10:30-12:30<br>Higher Education Models for Turkey<br>Gökhan Çetinsaya<br>Council of Higher Education

Gökhan Çetinsaya was born in 1964 in Istanbul. He graduated from the Faculty of Political Science at Ankara University in 1985 and completed his Master's degree in the same faculty in 1988. He received his PhD from the Department of Middle Eastern Studies at University of Manchester (1994). He served as Research Assistant (1986-1994), Assistant Professor (1995-1999) and Associate Professor (1999-2002) in the Department of Public Administration at Hacettepe University. He worked in the Department of Humanities and Social Sciences at Istanbul Technical University (2002-2008). He became a full professor in 2005. He worked as a visiting scholar/professor at University of London, School of Oriental and African Studies (2001), Free University of Berlin, Institute for Turcology (2004) and Woodrow Wilson International Center for Scholars (Washington DC, 2007-2008). He was rewarded the Malcolm H. Kerr Dissertation Award for the Best PhD Dissertation in Social Sciences at Middle East Studies Association of North America, MESA in 1994 and the Leigh Douglas Prize for the Best PhD Dissertation of the British Society for Middle Eastern Studies, BRISMES in 1995. Çetinsaya's field of study ranges from Ottoman Empire and Modern Turkey History (19th and 20th centuries), Middle Eastern History and Politics (19th and 20th centuries) to Turkish Foreign Policy. He is the author of Ottoman Administration of Iraq, 1890-1908 (London: Routledge, 2006, 2010).

Professor Çetinsaya worked as Chancellor of Istanbul Şehir University between 2008 and 2011. He was appointed as the President of the Council of Higher Education by President Abdullah GÜL on December 11st, 2011

Erhan Erkut<br>Özyeğin University

Prof. Erkut obtained an undergraduate degree from the Faculty of Engineering of Bogazici University in 1980 and a Ph.D from the University of Florida in 1986, both in Industrial Engineering. Between 1985 and 2005, he taught at the University of Alberta's School of Business, and was a visiting faculty member at the Univ. of Geneva, Ohio State Univ., NIDA (Bangkok), as well as Bogazici and Sabanci Universities. He received nine teaching awards, including the prestigious "INFORMS Teaching of Management Science Practice Award" and Canada’s "3M Teaching Fellowship," as well as five awards of merit, and four practice awards from the Canadian Operational Research Society.

Prof. Erkut, served as project leader for a number of externally-funded projects, founded an applied research center (Center for Excellence in Operations) at the University of Alberta, was the Founding Editor of INFORMS Transactions on Education, and published over 50 refereed journal articles in journals such as Operations Research, Transportation Science, European Journal of Operational Research, Interfaces, Computers \& OR, Risk Analysis, and Geographical Analysis. He served as Dean of the Faculty of Business Administration of Bilkent University between 2005 and 2007, before starting to serve as the Founding Rector of Ozyegin University in 2008.

Sunday, March 4, 2012
10:30-12:30

## Higher Education Models for Turkey

Üstün Ergüder, Sabancı University
Üstün Ergüder, Emeritus Professor at Sabanci University, received his undergraduate degree (BA Admin.) from Manchester University in England. He undertook his graduate studies at The Maxwell School of Citizenship and Public Affairs of Syracuse University (New York, USA), received his Ph.D. degree in Political Science in 1970 and joined the academic staff of Boğaziçi University. He has also been at the University of Michigan as a "Research Scholar" and taught at Syracuse University as well as the State University of New York, Binghamton, while on leave from Boğaziçi University. Between August 1992 and August 2000, he served as the Rector of Boğaziçi University for two consecutive terms. Prior to his appointment as Rector, he chaired the Department of Political Science and International Relations. Between November 2001 and June 2010 Dr. Ergüder served as the Director of the Istanbul Policy Center at Sabanc1 University. He is the author of various articles and books published in Turkey and abroad. He has also led and participated in several local and international collaborative projects involving survey research. He, currently, directs the Education Reform Initiative, an advocacy project located at Sabancı University and funded by 18 different Foundations the missions of which are education reform. Dr. Ergüder, currently, is the President of the Council of Magna Charta Observatory of Academic Freedom and Institutional Autonomy located in Bologna, Italy, and chairs the Executive Committee and the Board of Trustees of the Third Sector Foundation of Turkey. He is a member of the Board of Trustees of Özyeğin University, the Executive Board of Vehbi Koç Foundation, and sits on the Governing Board of the European Foundation Center.

## Öktem Vardar, TED University

Dr. Öktem Vardar graduated from Robert College, Istanbul in 1971 with a BS degree in Mechanical Engineering. He received his MS and PhD degrees at the University of California at Berkeley, in 1972 and 1975, respectively. He was a faculty member at Boğaziçi University from 1975 to 2004 where he was promoted to associate professor in 1981 and to full professor in 1988. His field of specialization covers mechanical design, mechanical behavior of engineering materials, fatigue and fracture mechanics. He established the Fracture Laboratory in Boğaziçi University. He served as the vice rector of Boğaziçi University in 1994-2000, and as the chairman of the Department of Mechanical Engineering in 20012004. He joined Işık University in 2004-2010 as the provost and the vice rector for academic affairs. Professor Vardar was a member of the Higher Education Council (YÖK), member of the Executive Board of the Scientific and Technical Research Council of Turkey (TUBITAK), chairman of the Executive Board of Feza Gursey Research Institute, member of the Executive Board of the Turkish Institute for Industrial Management (TÜSSIDE), member of the Executive Board of National Metrology Institute. He was the Secretary General of the Magna Charta Observatory in 2011; he is currently a reviewer in the EUA Institutional Evaluation Program and the president of TED University in Ankara, Turkey.

## Abdullah Atalar, Bilkent University

He received B.S. degree from Middle East Technical University, Ankara, Turkey in 1974, M.S. and Ph.D. degrees from Stanford University, Stanford, CA, in 1976 and 1978, respectively, all in Electrical Engineering. From 1978 to 1980, he was a Post Doctoral Fellow and later an Engineering Research Associate in Stanford University. For about one year he worked in Hewlett Packard Labs, Palo Alto. From 1980 to 1986, he was on the faculty of the Middle East Technical University as an Assistant Professor. In 1986 he joined the Bilkent University as the chairman of the Electrical and Electronics Engineering Department and served in the founding of the Department where he is currently a Professor. In 1995 he was a Visiting Professor of Stanford University. From 1996 to 2010, he was the Provost of Bilkent University. He is presently the Rector of the same university. His current research interests include microwave electronics and micromachined sensors. He was awarded the Science Award of Turkish Scienti ${ }^{-}$c Research Council (TUBITAK) in 1994. He is a Fellow of IEEE and a member of Turkish Academy of Sciences.

## Mustafa Aydın, Kadir Has University

He received B.S. degree from Middle East Technical University, Ankara, Mustafa Aydin, Professor of International Relations, is the Rector of Kadir Has University (Istanbul), as well as the President of the International Relations Council of Turkey. Previously he worked at Ankara University (1994-2005) and TOOB ETU (2005-2009). Having been guest researcher and/or lecturer at Michigan (1998), Harvard (2002, Fulbright fellow), Athens (2003, Onassis Fellow), Ankara (1994-2005) and University of Economics and Technology, various Turkish universities, Richardson Institute for Peace Studies (1999, Unesco Fellow) and the EU Institute for Security Studies (2003), Prof. Aydin is a member of International Studies Association (ISA), Turkish Atlantic Council, Turkish Political Sciences Association, European Society for Central Asian Studies (ESCAS), and International Network on Regional Security. He was Deputy Chairperson of International Commission of Eminent Persons on the Caucasus and Caspian (2007); Member of Economy and Foreign Policy Study Group of the President of Turkey (2003-2009), Co-Coordinator of the International Commission on Black Sea (2010); and Director of International Policy Research Institute (2005-2011). Prof. Aydın's areas of interest are International Politics, Foreign Policy Analysis, Security issues related to Central Asia, Caucasus, the Black Sea and the Middle East, as well as Turkish foreign and security policies. His most recent editions include International Security Today; Understanding Change and Debating Security (with K. Ifantis, 2006); Turkish Foreign and Security Policy (2006); Regional In/security: Redefining Threats and Responses (2007); Turkey's Eurasian Adventure (in Turkish, 2008); Turkish Foreign Policy; Old Problems, New Parameters (2010); and Non-Traditional Security Threats and Regional Cooperation in the Southern Caucasus (2011).

Sunday, March 4, 2012

$$
10: 30-12: 30
$$

## Murat Barkan, Yasar University

Murat Barkan (1958) has started his academic career as an assistant in educational communications, having completed his higher education in Communication Sciences at Anadolu University/TURKEY in 1981. His MA and PhD studies led him to specialize in instructional design and communication strategies. He then chaired the Department of Educational Communications, from where he became a full professor in 1994. His specific areas of academic research have focussed on educational message \& media design / distance education systems design, media design policies / instructional strategies / tactical \& political approaches in distance and open learning. He has initiated and developed 12 graduate and 15 undergraduate courses, specific to his field of interest. Prof. Barkan has also conducted 8 MA and 5 PhD thesis, published 10 international refereed articles, 9 books (comprised of 5 international English books and 4 books written in his native language), 3 chapters in internatonal books, and 8 proceedings, which have appeared in 20 international conferences books. Prof. Barkan has also been recognized for his significant contribution to national and international project development, realizing a total of 16 academic and scientific projects. Ford-Otosan e-Learning Project (2006) and the Turkish Learning Online Certificate Programme (2007) are the latest significant project based studies he has conducted. In the area of educational management, he was appointed Dean of the Faculty of Communication and Media Studies at the Eastern Mediterranean University (EMU), Gazimagusa/Turkish Republic of Northern Cyprus. He is now Rector of Yasar University located in Izmir/TURKEY since 2007.

## Nilgün Halloran, Ankara University

Born in 1962 in Sivas, Turkey. Completed Bachelors of Science (B.S.) degree program. in 1983 in the discipline of agricultural engineer through the Department of Horticulture in the Faculty of Agriculture of Ankara University. Graduated from the Graduate School of Natural and Applied Sciences of Ankara University with a Masters of Science (MSc.) and Doctorate of Philosophy (Ph.D.) in the years 1985 and 1991, respectively. Appointed to a Research Assistantship position while a graduate student between 1984 and 1991. Became an Assistant Professor in 1991, promoted to Associate Professor two years later (1993), and attained rank of Professor in 1999. Research focus is in the postharvest physiology of horticultural crops. As part of scientific experience, spent two years abroad at the University of California, Davis studying postharvest physiology. Member of the International Society for Horticulture (ISHS) and Turkish Society for Horticulture. In 2005, received the European Union's Framework Programme 6 Encouragement Award from The Scientific and Technological Research Council of Turkey (TÜBİTAK). Author on more than 100 publications. Administrative experience includes chair of the Department of Horticulture of Ankara University Faculty of Agriculture between 2003-2004; Vice Dean of Faculty of Agriculture at Ankara University between 2004-2008, and Vice Rector for Ankara University since 2008 and continuing in the present.

## Ümran İnan, Koç University

Ümran S. İnan received his B.S. and M.S. degrees in Electrical Engineering from Middle East Technical University, Ankara, Turkey, in 1972 and 1973, respectively, and the Ph.D. degree in Electrical Engineering from Stanford University, Stanford, CA, in 1977. Prof. Inan is currently the President of Koç University in Istanbul, Turkey. During 1982-2009, he served on the faculty of Stanford University, as a Professor of Electrical Engineering and as the Director of the Space, Telecommunications, and Radioscience Laboratory. While at Stanford, he authored or co-authored more than 300 scientific publications which have received more than 7500 citations, and served as the Principal PhD Dissertation Advisor for 46 students who graduated since 1990. Prof. Inan is a Fellow of the American Geophysical Union, a Fellow of the Institute of Electrical and Electronics Engineering (IEEE), a Fellow of American Physical Society (APS), and is a member of Tau Beta Pi, Sigma Xi, and the Electromagnetics Academy. He has served as the Chair of the U.S. National Committee of the International Union of Radio Science (URSI) and the International Chair of Commission H (Waves in Plasmas) of URSI. and as the Vice President of URSI. He is the recipient of the 2007 Stanford University Allan V. Cox Medal for Faculty Excellence in Fostering Undergraduate Research; the 1998 Stanford University Tau Beta Pi Award for Excellence in Undergraduate Teaching; several Group Achievement Awards from the National Aeronautics and Space Administration and the European Space Agency; the Antarctic Service Medal of the U.S., with an Antarctic Mountain named "Inan Peak" in his honor; and the 2008 Appleton Prize from URSI and the Royal Society. Professor Inan recently received 2010 Special Science Award from the Scientific and Technological Research Council (TUBITAK) of Turkey, and was elected as a Member of the Turkish Academy of Sciences (TUBA).

## Kemal Köymen, Maltepe University

Kemal Köymen is a Professor of Computer Science, at the Faculty of Engineering, Maltepe University, Istanbul, Turkey. He was the Dean of Faculty of Engineering from 2006 to 2008 and has been the President of the University since 2008. Mr. Köymen received the degree of doctorates in Computer Science from University of Pennsylvania in 1974 and the degree of Master of Science in the same field from Glasgow University in 1968. He did his undergraduate study in Mathematics and Physics at Istanbul University from 1964 to 1968. Mr. Köymen started his academic career at the American University in 1974, Washington, DC. In 1976, he joined TUBITAK- MAM (Marmara Research Center), Gebze, Turkey and chaired the Department of Computing till 1980. After working at the R\&D department of Chemical Abstracts Services, Columbus, OH, as a visiting scientist for 1 year, he held teaching positions at KFUPM, KSA, and Minnnesota State University until 2005.

Ender Suvac1, Anadolu University

Ender Suvac1 is Vice-Rector for Research and International Affairs at Anadolu University. He received his B.S. degree on Metallurgical Engineering from Middle East Technical University (METU) in 1993. He completed M.Sc. and Ph.D. studies on Materials Science at the Pennsylvania State University in 1996 and 1999, respectively. Dr. Suvaci received XEROX (best Ph.D. thesis in materials science) Award in 1999. Having worked at the Particulate Materials Centre at Penn State as a postdoctoral researcher for almost two years, he returned to Turkey and started to work in Department of Materials Science and Engineering at Anadolu University in 2001. Due to his outstanding research activities, he received METU Prof. Dr. Mustafa Parlar Education and Research Foundation Technology Incentive and Anadolu University Science and Technology Incentive Awards in 2002. Dr. Suvacı also performed his research activities in Germany at Darmstadt University of Technology (TUD) for 18 months as Alexander von Humboldt Research Fellow. After he returned from Germany, he became Technical Coordinator at Ceramic Research Centre, Inc. which is a joint venture between Anadolu University and 19 Turkish ceramic companies, located on Anadolu University campus.

Dr. Suvacı received TÜBİTAK (The Scientific and Technological Research Council) Incentive and Turkish Academy of Sciences (TÜBA) Outstanding Young Investigator Awards in 2006 and 2007, respectively. Dr. Suvaci is a co-founder of a spin-off company, called ENTEKNO Materials, which focuses on development and production of greener, safer and novel advanced materials for sustainable growth. His industry oriented research activities attracted attention and hence, he and his research team won Elginkan Foundation-Technology Award in 2009. He also received Junior Chamber International (JCI)-Turkey Ten Outstanding Young People Award in the area of Scientific Leadership in 2010 and Eskişehir Young Entrepreneurs Assembly 2011 High Technology Young Entrepreneur Award. Dr. Suvacı holds 1 U.S. and 3 Turkish national patents. He has over 75 scientific publications including papers and book sections. He has been Associate Editor for the Journal of the American Ceramic Society since 2005.

Sunday, March 4, 2012
10:30-12:30
Funda Sivrikaya Şerifoğlu, Düzce University
Prof.Dr. Funda Sivrikaya Şerifoğlu received her B.S. degree in Industrial Engineering from Boğaziçi University, Turkey. She graduated Boğaziçi University as the valedictorian and was granted an international study fellowship by the Turkish Education Foundation (TEV). She received her M.S. degree in Engineering Economic Systems from Stanford University, USA, and her Ph.D. degree in Industrial Engineering from Boğaziçi University. Research areas of interest to her are project and machine scheduling, and application of metaheuristic techniques to combinatorial optimization problems. She is also interested in sustainable development, and takes activiely part in several NGO and social responsibility projects. Prof.Dr. Sivrikaya Şerifoğlu served as the project coordinator of a pioneering strategic planning project at the province level (in Duzce) comprised of nine sub-projects and conducted by a team of university academicians with the contributions of more than 100 representatives from state and private sectors and NGOs under the technical supervision of the State Planning Organization of Turkey. Prof.Dr. Sivrikaya Şerifoğlu visited several European Union (EU) institutions as an invited guest by the European Parliament and the European Commision within the European Union Visitors Programme (EUVP) in 2008. Prof.Dr. Sivrikaya was also invited to take part in the State Visitor Leadership Programme of the American Government in 2010. She has participated in meetings in the Department of State in Washington DC, in several administrative and academic units of the Indiana University (Bloomington Campus), the University of North Carolina, North Carolina State University, and the Research Triangle Park.

She and her team tried to institutionalize a democratic, transparent and accountable management style and culture in Duzce University, which provides value for all stakeholders. The university is proud of the capability and eagerness to use the scientific knowledge and academical experience in project partnerships with stakeholders. Some of those projects aim to help support the sustainable development of the region and contribute to the welfare of the people living therein. Duzce University has been awarded the European Entrepreneurship Award in May 2011 with one such project. The university is the first and only new university having been able to found the technopark. The university ranks 7th in terms of publication density among the Turkish universities with more than 100 academicians. It is also the 3rd university to join the National Quality Movement and has been awarded 3 Star Certificate by Quality Association of Turkey (KalDer) in conjunction with EFQM. Every six months, an accountability meeting called 'Last 6 Months' is organized where the president presents projects conducted in the last six months and the plans for the next six months. The academic and administrative managers and directors answer all the questions coming from students, academicians, personnel, local governors, NGOs, unions, press, and other stakeholders present in the meeting. Prof.Dr. Sivrikaya Şerifoğlu is married and has a 19 years old daughter and a 13 years old son.

## Derin Ural, İstanbul Technical University

Dr. Ural is currently working at the Istanbul Technical University, as a Professor of Civil Engineering, and serves as the Vice President in charge of Academic and International Affairs. Derin Ural obtained her Masters Degree in 1992, and her PhD in 1995 from Princeton University, from the Department of Civil Engineering \& Operations Research, Structures \& Mechanics Division. She graduated in as the top of her class in 1989 with a B.S. from the Florida International University, Department of Civil and Environmental Engineering.

She coordinated a bi-national effort between Turkey and the United States Federal Emergency Management Agency, on Project ACHIEVE - "A Cooperative Hazard Impact-reduction Effort Via Education". Dr. Ural served as the founding director of the Center of Excellence for Disaster Management at the Istanbul Technical University. Dr. Ural serves as an expert to the European Commission and Turkish Prime Ministry on civil engineering and disaster management research and policy issues.

Dr. Ural has earned awards, including a fellowship from Kajima Corporation in Japan, Sigma Xi membership, Phi-Kappa-Phi Honor Society membership, and ASCE Murray Mantel Award. She is the editor of three Conference Proceedings, and author of numerous scientific papers. Dr. Ural was the founding secretary of the American Society of Civil Engineers, Turkey International Group, and has recently served as the group President. Prof. Ural is the executive secretary of the International Association for Housing Science. Prof. Ural was selected to serve on the Turkish Prime Ministry Earthquake Preparedness and Strategic Planning Board. Prof. Ural is the mother of two children.

Sunday, March 4, 2012
13:30-13:45

## The NeXXt Scholars Initiative

Sandra J. Laney,
Office of the Science \& Technology Adviser to the Secretary (STAS) U.S. Department of State

Dr. Laney is currently an American Association for the Advancement of Science (AAAS) Diplomacy Fellow at the U.S. Department of State. She is serving as a Senior Adviser on Gender, Science and Education in the Office of the Science and Technology Adviser to the Secretary. Sandra's work at the State Department includes spearheading the NeXXt Scholars Initiative, a partnership with U.S. women's colleges to increase opportunities for young women from predominantly Muslim countries to pursue undergraduate degrees in science, technology, engineering and math (STEM). Prior to her AAAS fellowship Sandra was a Research Scientist at Smith College in Northampton, MA and a Consultant for the Lymphatic Filariasis Support Center at the Task Force for Global Health in Decatur, Georgia. She has worked on neglected tropical diseases (NTDs), parasite genome projects, and molecular diagnostics for over 14 years and has been significantly involved in the diagnostics and monitoring of the Global Program to Eliminate Lymphatic Filariasis (GPELF). Sandra earned her both her bachelor's and master's degrees in Biological Sciences from Smith College and received her Ph.D. in Zoology/Molecular Parasitology from Ain Shams University in Cairo, Egypt.

## PARTICIPANT AFFILIATIONS

| Abbott Bioresearch Center | Federal Reserve Board | M | Turkayfe |
| :---: | :---: | :---: | :---: |
| Abdullah Gül University | Florida Institute of Technology | MITEQ Inc. | Turkish American TV |
| Acar Law Firm/ BOHP | Food and Drug Administration | Monell Chemical Senses Center | Turkish Armed Forces |
| Acibadem University | Gaziantep University | Montclair State University | Turkish Coalition of America |
| AJCC Early Childhood Center | GE Global Research Center | MSM Technologies | Turkish Embassy |
| American University | George Washington University | MTA-LRR | Turkish Philanthropy Funds |
| Anadolu University | Georgetown University | MUSC | Turkish Radio and Television |
| Ankara University | Georgia Institute of Technology | NASA GSFC / UMD ESSIC | Turkish Women's Initiative |
| Aptalis Pharmaceuticals | Girne American University | National Institutes of Health | Turkiye Daily |
| ATAA | Hacettepe University | Naval Research Lab | TUSIAD |
| ATA-DC | Harriet Fulbright College | New York University | U.S. Department of State |
| Atilim University | Harvard Medical School | NIH/NCI | UMass Amherst |
| Atlantic Wind Connection | Harvard School of Public Health | NIH/NIAAA | UMass Medical School |
| B \& E ASSOCIATES | Harvard University | NIH-CIT | UMBC |
| Bahcesehir University | Hazen and Sawyer | NIST | Undersecretariat for Defence |
| Baruch College, CUNY | Hitit University | North Carolina State University | Industries, Turkey |
| Bates White, LLC | Howard University | Northeastern University | United Nations |
| Berkeley National Laboratory | Hurriyet | Northern Virginia Community College | University at Albany, SUNY |
| BidBox LLC | IBM | NSF | University of Alaska |
| Bilkent University | IBM Research | Office of Science \& Technology | University of Bridgeport |
| Binghamton University - SUNY | IFC | Ohio State University | University of California, Los Angeles |
| Biopticon Corporation | Illinois Institute of Technology | Old Dominion University | University of California, San Francisco |
| Boğaziçi University | IMF | Opaxis | University of California, Santa Barbara |
| Boston College | Impact LLC | Ozyegin University | University of Central Florida |
| Boston University | Impaq International | Pamukkale University | University of Chicago |
| BOTAS - JHU | Indiana University | Pennsylvania State University | University of Delaware |
| Bridges of Hope Project | InnoEngineer Inc. | PMP | University of Erciyes |
| Brookings Institution | Istanbul Medeniyet University | Point Park University | University of Houston |
| Bucknell University | Istanbul Technical University | PPD | University of Illinois, Urbana Champaign |
| Cadmus Group | Istanbul University | Rensselaer Polytechnic Institute | University of Maryland |
| Cagal \& Associates LLC | IWA, WEF, AWWA | RINI Technologies, Inc. | University of Massachusetts |
| Carnegie Mellon University | Izmir Institute of Technology | Rochester Institute of Technology | University of Michigan |
| Central Bank of the Republic of Turkey | Izmir University of Economics | Rutgers University | University of Mississippi |
| CFTC | Johns Hopkins University | Sabah | University of North Carolina |
| CH2MHill | Kadir Has University | Sabanci University | University of Pittsburgh |
| CHLA-Children hospital-USC | Kaiser Permanente | Sanford-Burnham | University of Richmond |
| Columbia University | Kalara Corp | SAP Research | University of Rochester |
| Cornell University | Kean University | SDSU \& Bogazici University | University of Southern Florida |
| Cornell/ MSKCC | Koç University | Selçuk University | University of Texas |
| Cornerstone Research | KOSGEB | SETA Foundation | University of Virginia |
| Council of Forensic Medicine | Kulen Law Firm P.C. | Seton Hall University | UntraAMS, LLC |
| Council of Higher Education | Law Office of Timur Edib | Siemens Corporate Research | UT Southwestern Medical Center |
| CSIS | Lockheed Martin Corporation | Stevenson \& Associates | Vassar College |
| CSU-LB | Loyola College | Stony Brook University / BOHP | Virginia Commonwealth University |
| Daon Inc. | Maltepe University | Strayer University | Virginia Tech |
| DE Dept. of Natural Resources | Marmara Group Foundation | Study the Planet.LLC | Voice of America |
| DEIK-DTIK | Marmara University | Suffolk University | Walden University |
| Deloitte | Marymount University | Suffolk Universty | Walter Reed Army Institute of Research |
| Diniz Holding | Massachusetts General Hospital | SUNY Brockport | White Tulip Global |
| Dogan \& Associates | McNamara/Salvia Inc. | TACCI | Whitehead Institute |
| Drexel University | Medical College of Virginia | TED University | World Bank |
| Dumlupinar University | Medical University of SC | Teknopark | Xerox Corporation |
| Duzce University | Mesan Electronics | Temple University | Yale University |
| Early Care \& Learning Council | METU \& Cornell | The College of William \& Mary | Yasar University |
| Ege University | MGH Boston | The Ohio State University | Yıldırım Beyazıt University |
| Embassy of Turkey | Michael Baker Jr, Inc. | The World Bank |  |
| EncoreSolar | Michigan State University | theAIRnet.org |  |
| Everest Production | Middle East Institution | Theiss Research, NIST |  |
| Exponent Inc. | Middle East Technical University | TOBB University |  |
| Fairbanks Public Schools | Middough Inc. | Tooma \& Ozisik LLP |  |
| Fatih University | Ministry of Science, Industry, | TUBITAK |  |
| Federal Deposit Insurance Corporation | and Technology, Turkey | Tufts University |  |

## ABOUT TASSA

The Turkish-American Scientists and Scholars Association (TASSA) is an independent, non-profit and non-political organization promoting educational and scientific cooperation between the USA and Turkey. Established in June 2004 in Washington, D.C., it aims to facilitate the advancement of science in Turkey and the USA through scientific exchange and educational programs and increased networking.

## VISION

TASSA's vision is to build a sustainable science bridge between the U.S. and Turkey. This bridge would facilitate the flow of people (scientists and scholars), knowledge, and technology and help link science and technology institutions in the two countries. TASSA will accomplish its vision by:

- Exchanges of scientists
- Facilitating joint research projects and joint publications with scientists based in Turkey
- Facilitating sabbaticals
- Establishing a "Science Corps" for voluntary short-term assignments
- Forming networks of scientists based in the U.S. and Turkey in various disciplines
- Twinning of U.S. and Turkish scientific and academic institutions
- Facilitating the sharing of best practices among science institutions.

The building of a science bridge requires strong "legs" on both sides of the Atlantic. Thus, as a matter of priority, TASSA is strengthening its own internal organization, expanding its membership, and developing directories of people and institutions, in both Turkey and the US.

## ACTIVITIES AND PROGRAMS

During its short existence TASSA has held its first annual conference, developed a Web site, started its first program, and completed its organization.
The Visiting Scholars Program
This first program launched by TASSA aims to promote communication and cooperation between TASSA members in the US and their counterparts in Turkey. It helps match TASSA members planning to visit Turkey and are willing to share their research activities and experience with their colleagues in Turkey with Turkish universities or other institutions expressing interest in the research area of the visiting TASSA member. A database of potential host institutions in Turkey has been developed, as well as online application forms for those interested to serve as visiting scholars, or to host them in Turkey. TASSA members wishing to serve as visiting scholars can join the program through the TASSA Web site and Turkish institutions wishing to host such scholars can express their interest through an email addressed to: visitingscholars@tassausa.org.

## ORGANIZATION AND MEMBERSHIP

TASSA is governed by a Board of Directors, whose members are elected for two-year terms by the dues-paying members. The Board's Executive Committee serves as the principal administrative and managerial oversight body within TASSA, led by the TASSA President and President-Elect. TASSA's operations are managed by the Executive Director. In addition, several standing and ad hoc committees facilitate the operations of the organization. Three of these have played significant roles in the establishment and "take off" of TASSA: the Elections and Bylaws Committee, the Web Development Committee, and the Annual Conference Committee. TASSA's members are scientists and scholars in the fields of:

- Social sciences, arts and humanities
- Health \& biomedical sciences
- Engineering \& applied sciences
- Natural sciences.

For more information please visit: www.tassausa.org - For inquiries send message to: info@tassausa.org
Our mailing address is: 1526 18th Street N.W. Washington, DC 20036 USA
Give us a call at: +1-855-827-7204

## Diamond Sponsors



UNIVERSITY OF
MARYLAND
Robert H.Smith
SCHOOL OF BUSINESS


Gold Sponsors


## Silver Sponsors



## Sponsors



## Media Sponsor

## Championing Members



## Sustaining Members



## Promoting Members



ANADOLU ÜNIVERSITESI


## Sponsor Member




