

# UT Austin | Portugal Program

ANNUAL CONFERENCE 23<sup>rd</sup> and 24<sup>th</sup> May, 2016 Lisbon, Portugal



# **SPEAKERS**













### Opening



#### António Rendas Rector of Universidade Nova de Lisboa



António Rendas was born in 1949, in Lisbon, graduated in medicine at the University of Lisbon, in 1972 and obtained his PhD at the Cardiothoracic Institute of the University of London, in 1977. He has been Research Associate in Pathology at the Harvard Medical School and at the Children's Hospital Medical Center, in Boston, USA, in 1978. He did his public exam for Extraordinary Professor of Pathophysiology, in 1979 at the Faculty of Medical Sciences (FMS) and is Full Professor of Pathophysiology, since 1982. He was Director of the Institute of Tropical Medicine during three years (1983–1986), has been Vice-Dean for six years at the Faculty of Medical Sciences (1990–1996) and appointed Dean of the FMS in 1996 until 2006. President of the Portuguese Council of Rectors, since March 2010 until September 2014.

He has held numerous national and international consultancies and is currently member of the Consultative Council for Scholarships of the Calouste Gulbenkian Foundation, Member of the Executive Committee of the Association of Medical Schools in Europe, Member of the Steering Committee for the Autonomy Scorecard of the European University Association.

Member of the Network of Universities from the Capitals of Europe Steering Committee, since 2014.

#### Fernando Santana Dean of the School of Science and Technology – Universidade Nova de Lisboa



Fernando Santana (Full Professor) is currently the Dean of the School of Science and Technology – Universidade Nova de Lisboa and President of the Uninova (Institute for the Development of New Technologies) and the Madan Park of Science.

Professor Fernando Santana is the National Director of the Partnership Portugal – UTAustin.

His scientific and pedagogical career was focused on environmental and sanitary engineering.

He is the President of the Portuguese Academy of Engineering and Member of the Academy of Sciences of Lisbon.



### Marco Bravo Project Director, IC<sup>2</sup> Institute, University of Texas at Austin



His expertise focuses on entrepreneurial wealth creation, international innovation, and global technology commercialization.

He is an engineer with diverse international experience and education, as well as significant leadership and managerial experience in multinational business, consulting, academia, government, and startups with extensive cross-cultural literacy in Europe and the US.

As an entrepreneur, Marco has co-founded three companies, had one successful exit, and a business angel fund, and actively mentored 120+ technology startups and entrepreneurs from multiple countries.

He has graduate studies from reputable schools in Europe and the US, namely University of Minho, Mikkeli Polytechnic, Hannover University, Technical University of Lisbon, Carnegie Mellon University, and The University of Texas at Austin.

Robert A. Peterson Director, IC<sup>2</sup> Institute Director, Bureau of Business Research John T. Stuart III Centennial Chair in Business Administration



Dr. Robert A. Peterson is director of the IC<sup>2</sup> Institute and the Bureau of Business Research at The University of Texas at Austin, where he holds the John T. Stuart III Centennial Chair in Business. He has served as department chairman and associate dean for research in the McCombs School of Business, and associate vice president for research and interim director of the Office of Technology Commercialization at the University. He is a former editor of two top-tier marketing journals and has authored or co-authored in excess of 180 articles and books. He is a fellow of the American Marketing Association. In addition to co-founding three firms, he occasionally serves as an expert witness in intellectual property litigation.

António Cunha Rector of University of Minho President of the Portuguese Rectors Conference



António M. Cunha was born in Braga, Portugal, in 1961.

Graduated in Industrial Engineering (1984) and PhD in Polymer Engineering in 1991. Full Professor of the Polymer Engineering Department (DEP) of University of Minho (UMinho).

Research activity at IPC (Institute for Polymers and Composites – I3N Associate Laboratory), UMinho, developing several projects under the frame of national and European programmes, in the fields of structure development in polymer processing, non-conventional moulding techniques and tools and natural polymers.

Author of 120 refereed ISI papers, 3 books (editor) and 4 patents.

Dean of the School of Engineering of UMinho from 2005 to 2009.

Member of the Executive Board of PIEP (Innovation in Polymer Engineering) from 2001 to 2009 and CEIIA (Engineering and Innovation Centre for Automotive Industry) from 2005 to 2009.

Rector of University of Minho since 2009.

President of the Portuguese Rectors Conference since 2014.



Chairman of *Instituto Internacional Casa de Mateus* and of CEER Foundation (consortium of the Northern Portugal and Galician Universities).

Member of the Portuguese Engineering Academy.

Golden Insignia of the University of Santiago de Compostela.

Gold Medal and Honorary Citizen of Guimarães.

#### Paulo Ferrão President of the Board of Directors of the Fundação para a Ciência e a Tecnologia (FCT)



Paulo Ferrão is President of the Board of Directors of the Fundação para a Ciência e a Tecnologia (FCT). He had been the director of the MIT-Portugal programme since 2006, a strategic partnership set up between the Massachusetts Institute of Technology (MIT) and several Portuguese universities and research centres, supported and funded by FCT.

Paulo Ferrão is Full Professor at the Instituto Superior Técncio (IST) of the Universidade de Lisboa, where he leads the IST Energy Initiative, the PhD Programme in Sustainable Energy Systems and the IN+ research centre, for Studies in Innovation, Technology and Policy Research.



### **Achievements**



#### João Sentieiro



Former President of the Portuguese Science and Technology Foundation, in charge of the evaluation and public funding of all the scientific and technological activities carried out by the Portuguese Universities and Research institutions (2006-2012). Since January 2011 to January 2012 Vice-President of the European Science Foundation (ESF).

Professor João Sentieiro is a retired Professor of IST (Instituto Superior Técnico, and ISR, Lisbon). He graduated as an electrical engineer by IST and obtained a M.Sc. in Control Systems and a PhD in Electrical Engineering at Imperial College of Science and Technology in London. He has created and chaired the Institute for Systems and Robotics an Associate Laboratory until December 2005. He was President of the Electrical and Computer Engineering Department of IST. He was the Secretary of the Council of Associate Laboratories (CLA).

#### **DIGITAL MEDIA**

#### Nuno Correia Digital Media Coordinator at FCT/UNL



Nuno Correia is a Professor at the Department of Computer Science of the Faculty of Science and Technology of the Universidade Nova de Lisboa. He is the coordinator of the Multimodal Systems area of NOVA-LINCS, integrating a team of 11 researchers and about 20 doctoral students. His research interests cover aspects of describing, processing, delivering and presenting multimedia information. He was a researcher at Interval Research and a researcher at INESC. He participated in EU funded research projects and evaluated national and international projects (FP7). Current work includes video archives, mobile image processing for games, multitouch and interfaces for exploring art collections, medieval manuscripts and dance annotation. Nuno Correia supervised 8 doctoral theses and about 40 master theses. He is author or co-author of more than 90 publications in journals, conferences and books. He participated in the organization and was chair or co-chair of several international conferences (e.g., ACE, MobileHCI).



#### Dr. Sharon Strover

Philip G. Warner Regents Professor of Communication Moody College of Communication University of Texas at Austin;

Director, Technology & Information Policy Institute



Sharon Strover is the Philip G. Warner Regents Professor in Communication and former Chair of the Radio-TV-Film Department at the University of Texas where she now directs the Technology and Information Policy Institute. Recent research projects examine policy responses to the digital divide internationally and domestically; the economic benefits of broadband, particularly in rural areas; the role of libraries in local information environments; and the use of various digital media devices and platforms. She directs the international Digital Media program as part of a broader collaboration effort between the University of Texas at Austin and the government of Portugal. Dr. Strover has worked with several international, national and regional government agencies and nonprofits including the U.S. Department of Agriculture, the Center for Rural Strategies, the Benton Foundation, the Center for Rural Strategies, the European Union, the Ford Foundation, and the European Union.

#### António Coelho Assistant Professor at FEUP



António Coelho is Assistant Professor at the Department of Informatics Engineering of the Faculty of Engineering of the University of Porto where he teaches in the areas of Computer Graphics, Programming and Digital Games. He is the director of the Doctoral Program in Digital Media at the University of Porto and member of the Board of advisors of the UT Austin | Portugal Program.

António Coelho is also a senior researcher at INESC TEC and his research interests are focused in the areas of Computer Graphics, Serious Games and Geospatial Systems.

#### Carlos Ramos PhD Digital Media candidate



Carlos Ramos was born in 1978 in Lisbon. He holds a Pre-Bologna Degree in Electrotechnical and Computer Engineering and postgraduate studies in Cultural Management.

He is currently a PhD candidate in Digital Media in the UT Austin|Portugal program. His research about Interactive Installations with cinematographic content takes an exploratory approach by searching and proposing new forms of narrative and interaction.

He is the curator and co-director of PLUNC, a new media and digital art festival that had the first edition in September 2015, in Almada and Lisbon, with the support of UT Austin|Portugal program. Carlos Ramos is also a film programmer and producer of IndieLisboa International Film Festival.

#### Kathleen Tyner Associate Professor Department of Radio-Television-Film at the University of Texas at Austin



Kathleen Tyner is Associate Professor in the Department of Radio-Television-Film at The University of Texas at Austin (USA). She publishes, lectures and works internationally with programs related to the media arts, media literacy, civic communication and serious games. Professor Tyner is author, co-author and editor of numerous books, articles, research studies and curricular materials. Her current research projects include GamiLearning, in partnership with Portuguese researchers. She is a member of editorial boards and scientific committees for publications such as Revista Communicar (Spain) and is a founding board member for WeOwnTV, a community media center in Sierra Leone.

Keri K. Stephens Associate Professor, Organizational Communication & Technology Associate Director, Moody Center for Health Communication



Dr. Keri Stephens studies how people use technology to communicate in organizations and her recent research examines how multiple technologies and social media are used in health and crisis communication. Currently, she is writing a book. Organizations and Mobile Devices that explores the changes in organizations now that employees bring their personal mobiles to work. She has published over 45 peer-reviewed articles and book chapters, received 17 top paper awards, and co-authored a book. She is as Associate Editor for Management Communication Quarterly and on five editorial boards.

#### Paulo Nuno Vicente Digital Media Professor and iNOVA Media Lab coordinator at FCSH/NOVA



Paulo Nuno Vicente is a non-fiction multimedia storyteller. As a journalist and as a documentary filmmaker he has worked mainly in the so called «global south»: Guinea-Bissau, Ceuta and Melilla, São Tomé and Príncipe, Lebanon, Bosnia-Herzegovina, Israel and the West Bank, Cape Verd, Chad and Central African Republic, Brazil, Kenya, Senegal, Mozambique and South Africa. In 2013, he founded BAGABAGA STUDIOS, an interdisciplinary co-op dedicated to digital media production and training. He completed his PhD in Digital Media in 2013, in the scope of UT Austin Portugal Program, with a research project on the work of foreign correspondents in Sub-Saharan Africa. In 2015, at NOVA University of Lisbon, he created (and since then coordinates) iNOVA Media Lab, a research and development experimental laboratory dedicated to digital narratives, innovation and emerging technologies.



### Wenhong Chen Assistant Professor of Media Studies and Sociology at the University of Texas at Austin



Wenhong Chen (Ph.D. Toronto) is an assistant professor of media study and sociology at UT Austin. She was a SSHRC postdoctoral fellow at Duke University. Her research has focused on digital media technologies in multiethnic, entrepreneurial, and civic settings, supported by FCT, Pew, Ford Foundation, SSHRC, Asia Pacific Foundation of Canada, Bell Canada, and the City of Austin. Dr. Chen has published in top-ranked journals in the fields of communication and media studies, management, and sociology. She is the winner of the William F. Ogburn Mid-Career Achievement Award.

#### **EMERGING TECHNOLOGIES**

Paula Vilarinho
Professor of Materials Science and Engineering
University of Aveiro, Portugal



Paula Vilarinho is Associate Professor at the University of Aveiro (UA), Portugal and member of the Associate Laboratory, CICECO – Aveiro Materials Institute. She is currently: leader of the Electroceramics Group, President of the Portuguese Society of Materials (SPM), Coordinator (Portugal) of the Emerging Technologies Program within The University of Texas at Austin – Foundation for Science and Technology (FCT) Portugal Program (Collaboratory for Emerging Technologies, CoLab), Director of Undergraduate Studies of Materials Engineering, and Member of the Scientific Committee of the Doctoral Program in Materials Science and Engineering, UA. She has published over 260 papers, 4 book chapters, with ca. 3455 citations (h-index 32), 9 patent applications and edited 4 books in Materials Science and Engineering.

## Brian Korgel Edward S. Hyman Endowed Chair in Engineering & T. Brockett Hudson Professor of Chemical Engineering



Brian A. Korgel is the Edward S. Hyman Chair in Engineering and T. Brockett Hudson Professor of Chemical Engineering at the University of Texas at Austin. He directs the Industry/University Research Center (I/UCRC) for Next Generation Photovoltaics, the Emerging Technologies area of the UT|Portugal program and serves as Associate Editor of the journal *Chemistry of Materials*. He received his PhD in Chemical Engineering from UCLA in 1997 and was a post-doctoral fellow at University College Dublin, Ireland, in the Department of Chemistry. He works at the intersection of nano & mesoscopic materials chemistry and complex fluids, tackling problems in lithium ion batteries, photovoltaic devices and medicine. He has given more than 260 invited talks and has published 240 papers. He has been Visiting Professor at the University of Alicante in Spain, the Université Josef Fourier in France and the Chinese Academy of Sciences in Beijing. He has co-founded two companies, Innovalight and Piñon Technologies, and received various honors including the 2012 Professional Progress Award from the American Institute of Chemical Engineers (AIChE) and election to Fellow of the American Association for the Advancement of Science (AAAS).

#### Ana Senos Associate Professor, Department of Materials and Ceramics Engineering, University of Aveiro



Ana M. R. Senos is an Associate Professor in the Department of Materials and Ceramics Engineering at the University of Aveiro, Portugal, and member of the Associate Laboratory CICECO. She received the PhD degree in Materials Science and Engineering, from the University of Aveiro, in 1994. She has been involved in the investigation of composites and ceramic materials processing, on the topics of sintering kinetics, microstructural development, grain boundary design, constrained sintering, and the relation with the electrical answer and mechanical behaviour of materials.

#### Cristina Freire Full Professor, Faculty of Sciences, University of Porto



Cristina Freire is Full Professor in the Faculty of Sciences at the University of Porto, Portugal. She received her PhD from the University of Porto in 1991 and Habilitation in Chemistry in 2005 at the same University. She is a member of REQUIMTE-LAQV (Associate Laboratory for Green Chemistry), the largest network in Chemistry and Technology in Portugal: she is the scientific coordinator of the research group Catalysis & Functional and Smart Materials. She participated in several evaluation panels from Fundação para a Ciência e a Tecnologia (PhD and Post-doctoral grants and FCT Investigator calls), Agence National de Recherche (France), Agência Nacional de Inovação (Portugal), National agency for Research (Poland).

# Helena Florindo Assistant Professor and Head of Intracellular Trafficking Modulation for Advanced Drug Delivery Research Group (Research Institute for Medicines- iMed.ULisboa), Faculty of Pharmacy, University of Lisbon



Helena F Florindo received her Ph.D. in Pharmacy from the University of Lisbon in 2008. Her research interests focus on the design and development of nanomedicines for immunemodulation, through the characterization of intracellular trafficking and signalling pathways to efficiently overcome tumor immunosupressive properties. Over the last 7 years, H F Florindo obtained funding in competitive research grant calls and established a network of international collaborations with leading researchers, with whom she has joint project grants, namely Professor Nicholas Peppas from the University Texas.



Nicholas A. Peppas, ScD

Cockrell Family Regents Distinguished Chaired Professor

Departments of Chemical, Biomedical Engineering, Surgery (of the Dell Medical School) and Pharmacy

Director of the Institute for Biomaterials, Drug Delivery and Regenerative Medicine The University of Texas at Austin



Nicholas A. Peppas is the Cockrell Family Regents Chaired Professor in the Departments of Chemical, Biomedical Engineering, Surgery (of the Dell Medical School) and Pharmacy, and Director of the Institute for Biomaterials, Drug Delivery and Regenerative Medicine the University of Texas at Austin. Peppas is a world leader in biomaterials, polymer physics, drug delivery and bionanotechnology. The multidisciplinary approach of his research blends modern molecular and cellular biology with engineering to generate the next-generation of medical systems and devices for patient treatment. He set the fundamentals and rational design of drug delivery systems over the past forty years and developed models of drug and protein diffusion in controlled release devices and biological tissues. In 2012 he received the Founders Award of the National Academy of Engineering, the highest recognition of the Academy, for these contributions to the field. Peppas is a member of the National Academy of Medicine, the National Academy of Engineering, the National Academy of Inventors, the Academy of Athens (the Greek Academy), the National Academy of France, the Royal Academy of Pharmacy of Spain, and the Academy of Texas. He has been recognized with awards from AIChE (Founders Award, William Walker Award, Institute Lecture, Jay Bailey Award, Bioengineering Award, Materials Award), the Biomedical Engineering Society (Distinguished Scientist Award), the American Institute of Medical and Biological Engineering (Galletti Award), the Society for Biomaterials (Founders, Clemson and Hall Awards), the Controlled Release Society (Life Contributions, Founders, Heller and Eurand Awards) and other societies. In 2008, AIChE named him on of the One Hundred Chemical Engineers of the Modern Era. He is President of the International Union of Societies of Biomaterials Science and Engineering, Past-Chair of the Engineering Section of the American Association for the Advancement of Science, Past-Chair of the Council of BME Chairs, Past-President of the Society for Biomaterials and the Controlled Release Society. He is a fellow of AAAS, AIChE, APS, ACS, MRS, SFB, BMES, AIMBE, CRS, AAPS, and ASEE. He is a highly cited scientist (83,000 citations, H=140) and has supervised the research of 105 PhDs and about 180 postdocs and other graduate students. Peppas holds a Dipl. Eng. from the NTU of Athens (1971), a Sc.D. from MIT (1973), honorary doctorates from the Universities of Ghent (Belgium), Parma (Italy), Athens (Greece), Ljubljana (Slovenia) and Patras (Greece), and an honorary professorship from Sichuan University (China).

#### ADVANCED COMPUTING

#### Adélia Sequeira Professor at the Department of Mathematics of the Instituto Superior Técnico (IST), University of Lisbon



Adélia Sequeira is Professor at the Department of Mathematics of the Instituto Superior Técnico (IST), University of Lisbon. She served as director of the Research Center for Mathematics and its Applications - CEMAT/IST (2001-2007) and is a member of the Scientific Board of IST since 2013. Presently she is a member of the Board of Advisors of the UT Austin|Portugal Program and director in Portugal of the Advanced Computing area.

Her research group focuses on cardiovascular mathematical modeling and simulations, with some applications in clinical settings, towards predictive patient-specific medicine. An important part of her work is directed to an effective multidisciplinary collaboration with numerical analysts, computer scientists, bioengineers and clinicians, both in Portugal and abroad.

#### Keshav Pingali Professor, Department of Computer Science at the University of Texas at Austin



Keshav Pingali received the B.Tech. degree in Electrical Engineering from the Indian Institute of Technology, Kanpur in 1978, and the Sc.D. degree from M.I.T., Cambridge, MA in 1986. Between 1986 and 2006, he was on the faculty in the Department of Computer Science at Cornell University where he held the India Chair of Computer Science.

Since 2006, he has been a professor in the Department of Computer Science at the University of Texas at Austin and a member of the Institute for Computational Engineering and Science (ICES), where he holds the W.A."Tex" Moncrief Chair of Grid and Distributed Computing.

Pingali is a Fellow of the ACM, IEEE, and AAAS. He was the co-Editor-in-chief of the ACM Transactions on Programming Languages and Systems, and currently serves on the editorial boards of the International Journal of Parallel Programming, and Distributed Computing.

He also served on the NSF CISE Advisory Committee (2009-2012).

### Don Fussell Trammell Crow Regents' Professor, Department of Computer Sciences



Donald S. Fussell is Trammell Crow Regents' Professor in the Department of Computer Sciences, Director of the Laboratory for Graphics and Parallel Systems, a member of the Computer Engineering Research Center of the Electrical and Computer Engineering Department, and an IC2 Fellow. He obtained a BA from Dartmouth College in 1973, and an MS and PhD in Mathematical Sciences at The University of Texas at Dallas in 1977 and 1980, respectively. His research interests include Computer Graphics, Computer Games, Computer Architecture, and Computer Systems Design.

#### Hugo Paredes Assistant Professor, University of Trás-os-Montes e Alto Douro



Hugo Paredes received B.Eng. (2000) and Ph.D. (2008) degrees in Computer Science from the University of Minho, Portugal. Since 2003, he has been with the University of Trás-os-Montes e Alto Douro, where he is an Assistant Professor. He is a Senior Researcher at INESC TEC with main research interests in the domain of Human Computer Interaction. He is inventor of a granted patent and a provisional patent application, and has authored or co-authored more than 90 refereed journals, book chapters and conference papers. He participated in several national and international research projects.

# Dr. Thomas J.R. Hughes Peter O'Donnell Jr. Chair in Computational and Applied Mathematics Professor of Aerospace Engineering and Engineering Mechanics



Dr. Hughes is an elected member of the US National Academy of Sciences, the US National Academy of Engineering, the American Academy of Arts and Sciences, the Academy of Medicine, Engineering and Science of Texas, and a Foreign Member of the Royal Society of London, the Austrian Academy of Sciences, and the Istituto Lombardo Accademia di Scienze e Lettere. He has received six honorary doctorates and numerous national and international awards. He is known for his pioneering work in the Finite Element Method, Computational Fluid Dynamics and Isogeometric Analysis, and their application to patient-specific modeling and analysis in cardiovascular biomedicine.

#### APPLIED MATHEMATICS

#### José Miguel Urbano Professor of Mathematics



José Miguel Urbano is a Professor of Mathematics at the University of Coimbra. He holds a PhD from the University of Lisbon and did a postdoc at Northwestern University in Chicago. He is the author of the book "The Method of Intrinsic Scaling" and of over 40 scientific papers in the area of Nonlinear Partial Differential Equations. He has supervised four PhD students and ten postdoctoral fellows and is an associate editor of the journal "Nonlinear Analysis". He is currently a member of the Scientific Council for the Exact Sciences and Engineering of FCT, one of the Scientific Directors of the Carnegie Mellon/Portugal ICTI Program and a member of the Advisory Board of the UT Austin/Portugal CoLab Program.

#### Juha Videman Associate Professor of Applied Mathematics



Juha Videman is an Associate Professor of Applied Mathematics at the University of Lisbon and an Adjunct Professor of Fluid Mechanics at the Aalto University in Finland. He has a PhD in Mathematics from the Instituto Superior Técnico, MSc in Engineering from the Technical University of Helsinki and he worked as a Research Fellow at the University of Texas at Austin in 2008. He has authored over 40 scientific papers in the area of Mathematical and Computational Fluid Mechanics and edited 4 books. He has supervised four PhD students and three postdoctoral fellows. He is currently a member of the Executive Board of the Centre for Mathematical Analysis, Geometry, and Dynamical Systems at IST and a member of the Advisory Board of the UT Austin/Portugal CoLab Program.



## Irene Gamba Professor of Mathematics and leader of the ICES Applied Mathematics Group, The University of Texas at Austin



Irene M. Gamba is professor of mathematics and leader of the ICES Applied Mathematics Group. She holds the W.A. "Tex" Moncrief, Jr. Chair in Computational Engineering and Sciences III.

She earned her Ph.D. in mathematics at the University of Chicago in 1989 and held a National Science Foundation (NSF) postdoctoral fellowship at the Courant Institute at New York University, where she later became assistant and associate professor before coming to The University of Texas at Austin in 1997.

She is an active member of the Society for Industrial and Applied Mathematics (SIAM), the SIAM Activity Group on the Analysis of Partial Differential Equations (SIAG/APDE), the American Mathematical Society (AMS), the Association for Women in Mathematics, and the American Statistical Association. She was an AMS elected board member-at-large from 2002 to 2005 and elected chair and program officer for SIAG/APDE from 2007 to 2011.

#### Luis Angel Caffarelli

Sid W. Richardson Foundation Regents Chair in Mathematics No. 1 Department of Mathematics and The Institute for Computational Engineering and Sciences, The University of Texas at Austin



Luis A. Caffarelli earned his Ph.D. in mathematics from the University of Buenos Aires. He is professor of mathematics and holds the Sid W. Richardson Foundation Regents' Chair in Mathematics No. 1. He is also a core member of Institute for Computational Engineering and Sciences there.

The focus of Professor Caffarelli's research has been in the area of elliptic nonlinear partial differential equations and their applications. His research has reached from theoretical questions about the regularity of solutions to fully nonlinear elliptic equations to partial regularity properties of Navier Stokes equations. Some of his most significant contributions are the regularity of free boundary problems and solutions to nonlinear elliptic partial differential equations, optimal transportation theory and, more recently, results in the theory of homogenization.

Bjorn Engquist
Professor of Mathematics, UCLA
Michael Henry Stater University Professor of Mathematics and Applied and Computational
Mathematics, Princeton University



Bjorn Engquist received his Ph.D. in numerical analysis from Uppsala University in 1975. He has been professor of mathematics at UCLA, and the Michael Henry Stater University Professor of Mathematics and Applied and Computational Mathematics at Princeton University. He was director of the Research Institute for Industrial Applications of Scientific Computing and of the Centre for Parallel Computers at the Royal Institute of Technology, Stockholm. At Princeton University, he was director of the Program in Applied and Computational Mathematics and the Princeton Institute for Computational Science.

Engquist is a member of the Royal Swedish Academy of Sciences, the Royal Swedish Academy of Engineering Sciences, the Norwegian Academy of Science and Letters, and an elected member of the American Academy of Arts and Sciences. He was a Guggenheim Fellow, received the first Society for Industrial and Applied Mathematics Prize in Scientific Computing and the Henrici Prize.

# Gregory P. Pogue, Ph.D. Deputy Director, Senior Research Scientist Lecturer, Department of Rhetoric and Writing, College of Liberal Arts IC<sup>2</sup> Institute, The University of Texas at Austin



Dr. Gregory Pogue is Deputy Director and Senior Research Scientist at the IC2 Institute where he leads research and education programs accelerating technology commercialization, early venture creation and entrepreneurship in the US and many international sites. Dr. Pogue has extensive technology commercialization experience through senior positions in venture capital, entrepreneurial ventures, technology transfer offices and as a scientific innovator himself. As a scientist, he has led the development and testing of 16 drug products in clinical testing. Dr. Pogue has authored >56 original scientific articles and reviews and is an inventor on >35 issued and pending U.S. patents.

#### Bruce Flory Mentor and market development advisor, IC2's UTEN Portugal program, The University of Texas at Austin



Bruce Flory is a seasoned business leader, with 25+ years of enterprise and start-up experience. Bruce's strengths lie in Strategy, Marketing Operations and Business Development. A technologist to the core, Bruce has had serial success translating technical innovation into business growth- across multiple industries, employing a variety of B2B and B2C models.

Today Bruce continues to work with innovators and entrepreneurs worldwide, including as mentor and market development advisor within IC2's UTEN Portugal program, at the University of Texas.

Bruce is a graduate of the St Edward's University where he earned both a B.S. in marketing and an M.B.A.



### **Future**



#### Amílcar Soares Full Professor at the Instituto Superior Técnico



Amilcar Soares, is Full Professor at the Instituto Superior Técnico (University of Lisbon) in Portugal and Visiting Professor at Petroleum Institute of Abu-Dhabi (UAE), UFRGS and UFPE (Brasil). He is coordinator of the group for Modelling Petroleum Reservoirs, from CERENA (Research Center) at IST. He is the coordinator of the Petroleum Engineering PhD and Master programs of IST. He is the coordinator of the Energy Initiative of IST. His most recent R&D work is focused on the seismic characterization of oil reservoirs, reservoir engineering and geomechanical modelling of oil reservoirs.

#### Fernando Lau Assistant Professor at IST



Fernando José Parracho Lau concluded his PhD in Aerospace Engineering at Tecnico Lisboa in 2000 where he is an Assistant Professor at the Department of Mechanical Engineer. He is a researcher at Instituto de Engenharia Mecânica (IDMEC) in Aeroacoustics, Morphing Structures, Aircraft Conceptual Design and Optimization. He is the author of 18 papers in International Journals and presented more than 30 papers in national and international conferences. He has been evaluator of European Projects under FP7 and he is currently an evaluator for Agência Nacional de Inovação (ANInov), as well as several International Journals. He participated in various Research Projects (SNAAP, APIAN, FRIENDCOPTER, ARTIMA, 3AS, SMORPH e NOVEMOR). He is the Adjunct Coordinator of the Master in Aerospace Engineering at Tecnico Lisboa.



#### Lars Montelius Director General for INL, The International Iberian nanotechnology Laboratory, Braga, Portugal



Since Sept 1, 2014, Lars Montelius is Director General for INL, The International Iberian nanotechnology Laboratory located in Braga, Portugal.

INL is the only true International by status nanotechnology RTO worldwide.

Professor in Nanotechnology, Lund University, Sweden: His +25 years of work in nanotechnology has centred around lithography & processing applied to various nanodevices. Recent research interests are on exploratory nanotechnology in the life sciences, e.g. in the neuronanosciences.

Lars Montelius has published more than 144 articles, given more than 70 invited talks and has filed 24 patents.

LM is also the founder of several Swedish companies working with nanotechnology. Currently he is the President Elect for IUVSTA: The International Union for Vacuum Science, Technique and Applications and he is Working Group Chair of the two European Technology Platforms NANOFutures and EuMat.

#### José Manuel Mendonça

Full Professor, Department of Industrial Engineering and Management, Faculty of Engineering, University of Porto (FEUP) and President of INESC TEC



José Manuel Mendonça, 60, married, father of two.

Full Professor at the Department of Industrial Engineering and Management of the Faculty of Engineering, University of Porto (FEUP) and President of INESC TEC. Member of the Support Group and High-Level Group of the Manufuture European Technology Platform; Scientific Director of the University Technology Enterprise Network (UTEN). Chairman of the Board of Kinematics, SA.

#### **Heitor Alvelos** Professor of Design, University of Porto



PhD Royal College of Art 2003, MFA School of the Art Institute of Chicago 1992. Professor of Design, University of Porto.

Chair, Scientific Board (HSS), Foundation for Science and Technology. Member of Academia Europaea.

Director of ID+ on behalf of U.Porto.

Outreach Director, UTAustin-Portugal Program for Digital Media (2010-2014).

Curator, FuturePlaces Medialab (since 2008).

Course Director, PhD Design (U.Porto / UPTEC / FCT / U.Aveiro).

Acting Head, Drawing Studio (Royal College of Art, 1999 - 2001).

Has lectured extensively in four continents since 2001.

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#### **CLOSING**

#### Miguel Castanho Vice President of the Board of Directors of the Fundação para a Ciência e a Tecnologia (FCT) Full Professor at the Medical School of the Universidade de Lisboa



Miguel Castanho is Vice President of the Board of Directors of the Fundação para a Ciência e a Tecnologia (FCT), and Full Professor at the Medical School of the Universidade de Lisboa. He was designated deputy-dean of the School in 2011. He leads a research group at the Instituto de Medicina Molecular.

He holds a degree in Biochemistry from the Faculdade de Ciências da Universidade de Lisboa and a PhD in Molecular Biophysics, awarded by the Universidade Técnica de Lisboa, in 1993. His research interests lie in the development of new drugs to fight pain, Alzheimers' disease, tumors and viruses such as HIV and Dengue.



















