



YOU CAN FIND IN THIS COLABSQUARE EDITION:

- Professor and Biomaterials Expert Nicholas Peppas elected to the American Academy of Arts and Sciences
- 18th International Symposium on Online Journalism: Once again, a great success!
- The Digital Media Summer Institute is back for another amazing Summer!
- FCSH, FCT/UNL and U. Porto opened registrations for the PhD Course in Digital Media
- Tarik Barri lectured about Design and Development of Audiovisual Systems at U. Porto Media Innovation Labs
- Brian Cabral, Director of Engineering at Facebook, talked about The Future of Multidimensional Video at FCT/UNL
- John Fiege at Madeira and Porto to talk about the Power of Voice in the Cinema of Social Change
- Materials 2017: VIII International Symposium on Materials & XVIII Conference of the Portuguese Materials Society
- SABio – School in Advanced Biomaterials, a Satellite event of Materials 2017
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- Sphere Ultrafast Photonics appointed Market Tech, Inc. has first USA-based distributor
- Congratulations to our Digital Media Alumni Marta Ferraz!
- DIGITAL MEDIA DOCTORAL STUDENTS NEWS
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PROFESSOR AND BIOMATERIALS EXPERT NICHOLAS PEPPAS ELECTED TO THE AMERICAN ACADEMY OF ARTS AND SCIENCES

- **Nicholas Peppas, professor of Biomedical Engineering, Chemical Engineering, Surgery and Pharmacy at the UT Austin and an expert in biomaterials and drug delivery systems, has been elected to the American Academy of Arts and Sciences.**

Peppas is one of the 228 new members elected this year. They include some of the world's most accomplished scholars, scientists, writers and artists as well as civic, business and philanthropic leaders.

"Nicholas is a pioneer in oral drug delivery systems, and his breakthrough discoveries and inventions have had an enormous impact on quality of life around the world," said Sharon L. Wood, Dean of the Cockrell School of Engineering. "We congratulate him on this honor and on the significance of his many contributions to Engineering and Medicine".



Professor Nicholas Peppas, Biomedical Engineering Pioneer

Founded in 1780, the American Academy of Arts and Sciences is one of the country's oldest learned societies and independent policy research centers, convening leaders from the academic, business and government sectors to respond to the challenges facing — and opportunities available to — the nation and the world. Members contribute to academy publications and studies in Science, Engineering and Technology Policy; Global Security and International Affairs; the Humanities, Arts and Education; and American institutions and the public good.

Peppas has been a highly accomplished professor, innovator and entrepreneur throughout his career. He has six honorary doctorates, 43 U.S. patents pending or issued, three companies founded and more than 1,350 papers published. He joined the UT Austin faculty in 2002 and served as Chair of the Department of Biomedical Engineering from 2009 to 2015.

Among his accolades, Peppas has received the Founders Award from the National Academy of Engineering, the Acta Biomaterialia Gold Medal, the Founders Award from the American Institute of

Chemical Engineers and the Benjamin Garver Lamme Excellence in Engineering Education Award from the American Society for Engineering Education. He is the recipient of the Robert A. Pritzker Distinguished Lecture Award and was recognized by the American Institute for Chemical Engineers with a symposium honoring his “40 Years of Impact at the Frontiers of Science and Engineering”. In addition, he is a member of the National Academy of Medicine, the National Academy of Engineering, the Royal Academy of Chemistry, the National Royal Academy of Spain, the National Academy of France and the National Academy of Athens.

Members of the 2017 American Academy of Arts and Sciences class include winners of the Pulitzer Prize and the Wolf Prize; MacArthur fellows; Fields medalists; Presidential Medal of Freedom and National Medal of Arts recipients; and Academy Award, Grammy Award, Emmy Award and Tony Award winners.

The new class will be inducted at a ceremony on October 7 in Cambridge, Massachusetts. The list of the 237th class of new members can be viewed at www.amacad.org/members.

18TH INTERNATIONAL SYMPOSIUM ON ONLINE JOURNALISM: ONCE AGAIN, A GREAT SUCCESS!

■ **The global conference attracted journalists, academics and media executives from about 35 countries who met to talk about Accountability, Fact Checking, Video, Business Models, Podcasts and much more.**

There are few occasions when the world's greatest experts in journalism gather to discuss, brainstorm and learn with and from each other. The annual International Symposium on Online Journalism (ISOJ), hosted and organized by the Knight Center for Journalism in the Americas, is one of those occasions.

The eighteenth edition of ISOJ, held at the University of Texas at Austin, on April 21 and 22, featured two days of panel discussions and keynote addresses from industry representatives and highlighted a renewed sense of confidence and optimism in the future of the news industry.

Sixty-eight speakers and panelists discussed innovations in digital journalism, including fact checking, accountability journalism, conversational journalism, video, podcasts and startups.

With about 435 participants from all around the world, this edition of ISOJ continues to confirm the ongoing success of this annual event that started in 1999 by the hand of Professor Rosental Alves, founder of the Knight Center for Journalism in the Americas and UNESCO Chair in Communication at the University of Texas at Austin.

To know more about ISOJ 2017 please visit the official website: <http://www.iso-j.org/>.

ABOUT ISOJ:

The International Symposium on Online Journalism is an annual gathering of journalists, producers, media executives, researchers and academics from around the world who convene, every year, at the University of Texas to discuss the latest trends, issues, business models and innovations on Online Journalism. Major Support to ISOJ comes from the John S. and James L. Knight Foundation. Other sponsors of ISOJ 2017 included Google, The Dallas Morning News, Open Society Foundations and Univision News.



Professor Rosental Alves, founder of ISOJ, spoke at this year's Welcoming Session
Credits: Knight Center for Journalism in the Americas

THE DIGITAL MEDIA SUMMER INSTITUTE IS BACK FOR ANOTHER AMAZING SUMMER!

- The Digital Media Summer Institute it's a hands-on, minds-on learning experience unlike any other! The eleventh edition is already in motion.

This year's program will offer students and professionals, in Lisbon and Porto, the opportunity to complete seven short courses in May, June and July that cover several areas of the Digital Media Program.

The Digital Media Summer Institute's activities are taught by renowned faculty from the University of Texas at Austin and aims to increase our understanding of and abilities to work with digital media technologies.

THE ARTIST JILL BEDGOOD TALKED ABOUT VISUAL CONNECTIVITY IN EARLY MAY

This year's Summer Institute kicked off on May 3 at the iNOVA Media Lab, FCSH/UNL, with a workshop on **Visual Connectivity** taught by the American Artist Jill Bedgood.

Focusing on visual art and its ability to communicate a concept as a catalyst for conversation, the workshop addressed fundamental issues of creating art in the public realm.

Defining the goals of the art, from socio-political to sound or light based and everything in between, selecting the most effective media, identifying the audience, determining scale from grand to intimate personal discoveries, manipulating approved venues or employing subversive less traditional activities, were topics discussed within the context of the individual artist.



Jill Bedgood class was about Creating Art in the Public Realm

WHAT COMES NEXT?

From June 5-16, Simon Quiroz, from UT Austin, will be at iNOVA Media Lab, in Lisbon, to give a two weeks hands-on skill training and prototype production of immersive short documentaries integrated in Unity 3D.

The short course is entitled **Immersive Media: Producing VR documentaries in Unity 3D** and participants will develop and capture original 360° video documentary footage and integrate it within a game engine.



Simon Quiroz, UT Austin

From June 19-23, Daniel Carter, from UT Austin, will be at U. Porto Media Innovation Labs to give a short course entitled **Introduction to Digital Humanities Research**.

The five-day course will introduce graduate students to techniques for analysing humanities data, with focus on textual data. Topics will include feature extraction, exploratory analysis and data visualization, as well as a basic introduction to machine learning techniques such as topic modelling and support vector machine classifiers. The course's emphasis will be on developing a conceptual understanding of techniques in order to think about how they might be used in future work. Along with the reading of core digital humanities texts, this technical understanding will be used to ground discussions of questions that are central to digital humanities work such as how aggregate quantitative data can be used to understand situated cultural objects.



Daniel Carter, UT Austin

From June 26-28 it will be Patricia Galloway's turn to approach the topic **Thinking about Preserving Digital Culture: What to preserve and how** at U. Porto Media innovation Labs. The course will focus on the broad range of digital materials to be preserved, drawing on examples from materials that have been preserved archivally in the School of Information at University of Texas at Austin from 2003 to the present.

It will cover aspects of archival preservation of digital materials, including what is preserved, why it is preserved, and the means of providing access: the theme here is how we can preserve the digital culture we have been making as individuals for the last forty years. The course will discuss technicalities like format identification and the use of metadata as well as the guarantee of authenticity through message digests and electronic records and archival repository construction, use and administration. The use of existing standard practices in the information technology field and how they are being adapted to archival requirements will also be touched on: digital forensics, code versioning, text mining and IT auditing.

In early July, Prof. Rosental Alves, from UT Austin, will be at U. Porto Media Innovation Labs (July 3-7) to address the issue **Entrepreneurial Journalism: Innovation and creativity to adapt to the new media ecosystem**.

In this one week workshop participants will be guided and challenged on how to think about the contemporary media ecosystem and apply the main typologies of media innovation to existing and original projects.

From July 10-14 two workshops will take place simultaneously in Lisbon and Porto:

Ben Bays, from UT Austin, will be at FCSH/UNL – iNOVA Media Lab to give a short course entitled **Immersive Media: Producing augmented reality for storytelling projects**.

Participants will conceive and develop original fiction and/or non-fiction stories based on augmented reality (AR) techniques. AR has a variety of applications from big data visualization, pedagogical innovation, remote training, advertising and entertainment. Using established and bleeding-edge digital production techniques, the students will explore the use of AR to how we tell modern stories with augmented images, objects and spaces. Reality itself is the canvas for CG, VFX and animation.



Patricia Galloway, UT Austin



Rosental Alves, UT Austin



Ben Bays, UT Austin

On the other hand, Lucy Atkinson will talk about **Understanding Persuasive Environmental Communication and Imagery** at U. Porto Media Innovation Labs.

This graduate-level course will explore science and environmental communication from a persuasive angle. The focus is on theories and best practices as they relate to communicating effectively about contemporary complex issues, such as climate change, species loss, access to potable water, etc. The seminar tackles the question of how do we encourage audiences to think about value and act on behalf of the environment. It will examine the following themes: 1) the social construction of the environment and environmental problems; 2) how the environment is communicated in mass media; 3) theories of persuasion and how mass communication can change attitudes related to the environment; and 4) theories of behaviour change and how persuasive communication can facilitate environmentally friendly behaviours. A common touchpoint running through each theme will be the role of visuals. Special attention will be paid to theories of information processing and visual depictions of the environment and environmental issues, for example in advertising, infographics and data visualization images.



Lucy Atkinson, UT Austin

To know more information about the Digital Media Summer Institute 2017 please visit:
http://utaustinportugal.org/news/digital_media_summer_institute_2017

DIGITAL MEDIA

SUMMER INSTITUTE_2017

COURSES_

<p>LISBOA > FCSH - iNOVA Media Lab</p>	<p>May 3-5 May 8-9 Visual Connectivity Jill Bedgood, Artist</p>	<p>June 5-16 Immersive Media: Producing VR documentaries in Unity 3D Simon Quiroz, UT Austin</p>	<p>July 3-7 Entrepreneurial Journalism: Innovation and creativity to adapt to the new media ecosystem Rosental Alves, UT Austin</p>	<p>July 10-14 Immersive Media: Producing augmented reality for storytelling projects Ben Bays, UT Austin</p>
<p>PORTO > U. Porto Media Innovation Labs</p>	<p>June 19-23 Introduction to Digital Humanities Research Daniel Carter, UT Austin</p>	<p>June 26-28 Thinking about preserving digital culture: what to preserve and how Patricia Galloway, UT Austin</p>	<p>July 10-14 Understanding Persuasive Environmental Communication and Imagery Lucy Atkinson, UT Austin</p>	

APPLICATIONS ARE NOW OPEN _ See how to apply to Lisbon and Porto courses at www.utaustinportugal.org

UT Austin | Portugal
 INTERNATIONAL COLLABORATORY FOR EMERGING TECHNOLOGIES, COLAB

THE UNIVERSITY OF
 TEXAS
 AT AUSTIN

FCT Fundação para a Ciência e a Tecnologia
 MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E ENSINO SUPERIOR

FCSH
 FACULDADE DE CIÊNCIAS
 SOCIAIS E HUMANAS
 UNIVERSIDADE NOVA DE LISBOA

IM
 iNOVA Media Lab
 UNIVERSIDADE NOVA DE LISBOA

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Program of the Digital Media Summer Institute 2017

- This is a joint program between the University of Porto and The New University of Lisbon, with the support of the University of Texas at Austin, aiming at specialized training in digital media.

For the school year 2017/2018 the Doctoral Program in Digital Media offers 15 places at University of Porto and 8 places at the New University of Lisbon.

The FCSH/UNL was recently accepting applications for the PhD course in Digital Media. The single phase of applications ran from April 20 to June 16 with four open positions. João Mário Grilo (FCSH/NOVA), Nuno Correia (FCT/NOVA) and Teresa Romão (FCT/NOVA) are part of the Selection Panel. The results will be published between July 11 and July 14.

The FCT/UNL was also accepting applications for the PhD Course in Digital Media with four open positions. The first phase of applications is running from April 7 to June 23. There will be a second and third phase of applications.



For the academic year of 2017/2018 the Doctoral Program in Digital Media at U. Porto offers 15 places and the applications take place over three phases. The first phase of applications ran from December 12 to January 18. The second phase of applications ran from March 24 to April 24. There will be a third phase of applications starting at the end of June.

DO YOU WANT TO SUBMIT YOUR APPLICATION? SAVE THE DATES!

- **U. Porto**

3rd Phase: from the 30th of June to the 7th of August 2017

- **FCT/UNL**

2nd Phase: from the 26th of August to the 10th of September 2017

3rd Phase: To be announced

ABOUT THE PHD COURSE IN DIGITAL MEDIA

The recent development of new applications in the area of digital media such as videogames, interactive content on the Web, interactive TV, video-on-demand, new educational software with high impact among the young generations and, more recently, the appearance of information, marketing and leisure content in mobile devices, demonstrate how important is the research on these new types of content and their close relationship with the technologies and their application. It is now very clear that universities must contribute through the creation of professionals in these areas at all levels, including the doctoral level. The final aim of the program is to train researchers, university teachers and innovation leaders in fundamental and applied areas associated with Digital Media.

Typical duration of the program is 4 years full time (240 ECTS), including one year of courses and the three following years of research. The course is organized in the following specializations: (1) Audiovisual and Interactive Content Creation, (2) Technology, (3) Industry, Public and Markets.

Students registered in this program can apply to a **Dual Degree at UT Austin** and have access to an exploratory visit to UT Austin for selecting researchers to collaborate in the development of their doctoral thesis or to enrol specific courses.

The PhD Program aims to train researchers, university professors and leaders in innovation processes in the fundamental and applied areas of Digital Media, ensuring that the doctors are prepared for the practice of a profession, which is generally based on the capacity of:

- A) Create, produce and distribute digital media, taking into account the target audience and the overall value chain associated with the field;
- B) Managing teams of creative and producers;
- C) To carry out a specialized professional activity, in organizations of creation, production and treatment of contents aiming at its distribution for varied effects, from mass media, education, leisure, through marketing, video games and corporate broadcasting.

For applications or more information please visit:

- U. Porto
<https://dei.fe.up.pt/pdmd/en/applications/>
- FCSH/UNL
<http://fcsch.unl.pt/escola-doutoral/doutoramentos/media-digitais>
- FCT/UNL
<http://www.fct.unl.pt/ensino/curso/doutoramento-em-media-digitais>

TARIK BARRI LECTURED ABOUT DESIGN AND DEVELOPMENT OF AUDIOVISUAL SYSTEMS AT U. PORTO MEDIA INNOVATION LABS

- Digital Media PhD program at U. Porto invited the distinguished artist Tarik Barri, who created the software “*Versum*”, to give a talk on the 27th March.

What originally began as his final master’s project at the Utrecht School of Arts evolved into a project that was constantly developing over 10 years, which now lays the foundation for his audiovisual and artistic work. *Versum* is a software for audiovisual composition in a three-dimensional space, easily navigable by three dimensions with a joystick. *Versum* was implemented in MaxMSP/Jitter and in Java running in sync with Ableton Live. With the development of *Versum*, Barri created a personal and unique tool to compose unique immersive audiovisual experiences and alternative realities.

In this Lecture, Barri talked about his life story, from early experiments with “telling the computer what to do”, at the early age of 5, through discontinued studies in Architecture and Psychology, via Music Technology to the creation of his own software known as *Versum*.

Versum allows Barri to create visible and audible compositions (known as verses) simply by placing



Tarik Barri lecturing at U. Porto Media Innovation Labs
Credits: U. Porto Media Innovation Labs

objects in three-dimensional space. The composition can be explored (or performed) by flying through using a joystick.

The core of Barri’s work focuses on the development of *Versum* (since 2008), but interestingly enough, he uses

the tool not only for his own audiovisual compositions, but also for creating visuals for other artists. Notably, he has worked with Monolake, Atoms for Peace (Thom Yorke), Nicolas Jaar and Paul Jebeanasam (as Continuum). Over the course of his artistic explorations within his own creation in code, Barri has developed an organic and unique approach to creating generative visuals. In the future, he hopes to add other senses to the experience

and to map *Versum* into VR.

The artist's talk attracted students from the UT Austin Portugal Digital Media PhD Program and the Multimedia Master Program, as well as students from other programs from the Fine Arts and the Arts faculties at U. Porto. We look forward to welcoming Tarik back in Porto for future collaborations.

ABOUT THE SPEAKER

Tarik Barri has developed a symbiotic relationship with computers since the young age of 7 years, especially with regard to Programming.

By the age of 16 he made music with his computer and in his 20s created the first versions of *Versum*, the application that allowed him to develop his audiovisual creations and that continues to be the current basis of his work.

Barri graduated in Music and Technology at the School of Arts of Utrecht. His work has presentations in several places like DEMF, Sonic Arts, Ars Electronica, Club Transmediale, TodaysArt, MIT Media Lab, EMPAC, among others.

He was also a guest speaker at the Berklee College of Music (Boston, US), CCRMA (San Francisco, US), Universität der Künste (Berlin, DE) and Utrecht School of Music and Technology (Hilversum, NL). The project developed together with Anselm Nehls was awarded with the Prix Ars Electronica Award of Distinction.



Tarik Barri, Dutch Audiovisual Artist

BRIAN CABRAL, DIRECTOR OF ENGINEERING AT FACEBOOK, TALKED ABOUT THE FUTURE OF MULTIDIMENSIONAL VIDEO AT FCT/UNL

- The lecture addressed the future of stereo image capture by 360 camera prototypes, introducing a new era of multidimensional video.

Under the agreement with the US Embassy and within the scope of its partnership with the FCT NOVA 'American Corner', the Faculty of Science and Technology received recognized American speakers who covered themes from several scientific areas.

On May 3, Brian Cabral, Researcher and Director of Engineering at Facebook, talked about The Future of Multidimensional Video.

The advent of small monoscopic 360 cameras and stereo capture camera's like Surround360 have ushered in a new era of multidimensional video image capture. It represents a transition in media nearly as profound as the transition from film video to digital. Digital video capture changed the film industry by simultaneously lowering cost while increasing creative latitude for directors and producers. It also democratized the medium because movie

magic that only big studios could afford could now be done with sophisticated digital tool chains – so too with 360 and 360 stereo capture.

Facebook is one of the companies that works harder for virtual reality and is launching new products based on this technology. It was discussed the technical, artistic and tool chain challenges confronting this medium, focusing on the technical and market place elements that both drive and hinder progress.

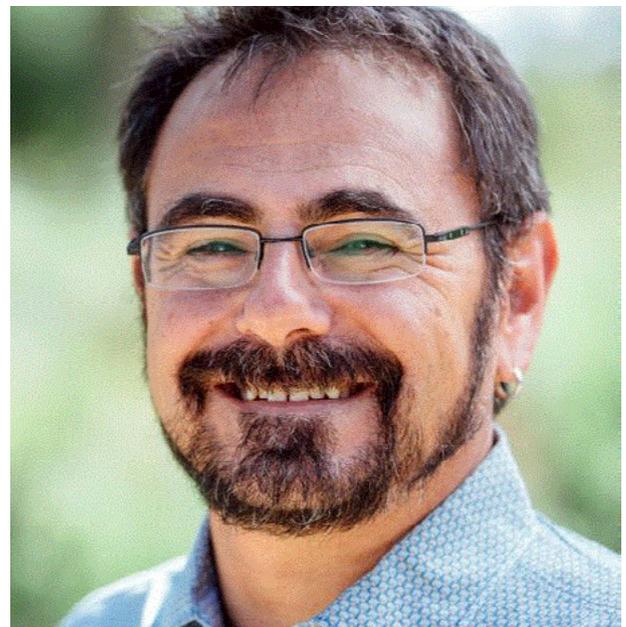
The lecture was attended by a large specialized audience in media, cinema, virtual reality, computer science and social sciences.



The FCT/UNL library hosted the lecture “The Future of Multidimensional Video” given by Brian Cabral
Credits: bibliotecaunl.blogspot.pt

ABOUT THE SPEAKER

Brian Cabral is the Director of Engineering at Facebook and responsible for Facebook Surround 360 VR video camera. Drove Facebook’s VR capture and computational imaging initiatives and hiring at the executive level. Lead and shipped advanced computation imaging features across. Facebook’s products and infrastructure including: auto enhance filters and JPEG and compression improvements.



Brian Cabral, Director of Engineering at Facebook

JOHN FIEGE AT MADEIRA AND PORTO TO TALK ABOUT THE POWER OF VOICE IN THE CINEMA OF SOCIAL CHANGE

- **John Fiege, UT Austin Professor, makes films that engage pressing issues of environmental and social justice through the voices of those on the frontlines on injustice.**

Within the context of UT Austin and M-ITI partnership, the 6th edition of the Madeira Film Festival brought to Madeira Island - Portugal, John Fiege, American Director, Cinematographer and Professor at the University of Texas at Austin, where he presented with Anita Grabowski, his wife, a three-hour masterclass entitled “The Power of Voice in the Cinema of Social Change”.

The Madeira Film Festival is an international independent film festival inspired by nature, that brings together various initiatives related to sustainability, art, education, ecotourism and recreation.

The masterclass on environmental and social justice filmmaking, which took place on April 19 at the Baltazar Dias Municipal Theater, with an audience that included festival goers, film enthusiasts and particularly students of interactive technologies, discussed the role of the interactive cinema, namely the importance of cinematography to transform approaches of political subjects into something personal and emotive.

The masterclass focused on the power of voice in the cinema of change and social intervention, through the exploration of the cinematographic work of John Fiege and Anita Grabowski, who's a producer on his films. Some of John Fiege's films were screened and the following topics were discussed: Storytelling, Production, Interactivity, Outreach, Fundraising and Perseverance in a media landscape dominated by commercial interests.

The Madeira Film Festival took place from April 17 to 23 and in its sixth edition the Festival stood out for its diversified program combining cinematography with musical concerts, lectures, workshops and solidarity fashion shows in an intimate and unique setting.

A few days later, on April 26, John Fiege gave a talk in the Faculty of Fine Arts of the University of Porto (FBAUP) on the same subject. The audience was mostly graduate students working in digital media and the following questions were explored: Can media change people's minds? Where is the line between consent and exploitation of subjects and participants? What are we trying to achieve with our work? Should we be more or less like Michael Moore?



John Fiege and Anita Grabowski (seated at his left) at Madeira Film Festival 2017
Credits: Madeira Film Festival



John Fiege (UT Austin) and Heitor Alvelos (U. Porto) at FBAUP
Credits: Heitor Alvelos

ABOUT JOHN FIEGE

John Fiege is a director, cinematographer, and photographer whose films have played at the Cannes Film Festival, SXSW, Museum of Modern Art, and Hot Docs, among many others. His latest film, ABOVE ALL ELSE, is a feature-length documentary about the Keystone XL pipeline that premiered at the 2014 SXSW Film Festival, with an international premiere at Hot Docs. The film won Best North American Documentary at the Global Visions Festival and a Special Jury Prize at the Dallas International Film Festival. MISSISSIPPI CHICKEN, his intimate portrait of immigrants working in the poultry industry, was nominated for a Gotham Award for "The Best Film Not Playing at a Theater Near You." He recently photographed the 2014 Sundance documentary selection, NO NO: A DOCKUMENTARY. He holds a BA from Carleton College, an MS in cultural geography and environmental history from The Pennsylvania State University, and an MFA in film production from the University of Texas at Austin, where he also works as a lecturer.

MATERIALS 2017: VIII INTERNATIONAL SYMPOSIUM ON MATERIALS & XVIII CONFERENCE OF THE PORTUGUESE MATERIALS SOCIETY

- **The University of Aveiro was the meeting point of scientists, researchers, engineers and companies that develop work in the area of Materials.**

The most recent discoveries and opinions in the field of Materials were shared in an International Conference in order to explore the latest developments in the search for scientific solutions to the World.

MATERIALS 2017: VIII International Symposium on Materials & XVIII Conference of the Portuguese Materials Society took place, this year, from April 9 to 12, at the beautiful city of Aveiro, Portugal, where already two previous Conferences were held.

MATERIALS 2017, aiming to explore the latest progress in Materials Development and to Bring Science Solutions to the World, provided the ideal forum for scientists, developers, engineers and companies to share their latest breakthroughs, achievements and views in the field of Materials.

The International Conference covered all areas of Materials from Functional Materials, Structural Materials and Processing Technologies to the Characterization and Modelling.

The Conferences of the Portuguese Society of Materials (MATERIALS) take place every two years, since 1983, and are filled with plenary lectures by national and foreign experts. The first SPM (Portuguese Society of Materials) meeting (MATERIALS 1983) took place at the LNEC facility, in Lisbon. MATERIALS finally returned to Aveiro, after two former editions (1995 and 2005).

During 3 days, MATERIALS 2017 have encompassed schools, scientific talks, debate sessions on cutting edge technologies and a show case event of applications based on scientific development.



Debate on Additive Manufacturing
Credits: University of Aveiro



Plenary Talk – Angus Kingon
Credits: University of Aveiro

MATERIALS 2017:

- Participants from 36 different countries
- > 400 Abstracts submitted
- ~ 200 Posters
- ~ 200 Orals
- 3 Plenary Talks
- 3 Keynote Talks
- 11 Invited Talks
- 2 Schools
- 1 Satellite Event on Energy
- 1 Debate on Additive Manufacturing
- Show Case of Technologies
- Exhibition Hall

MATERIALS 2017 Website: <http://materiais2017.web.ua.pt/>

MATERIALS 2017 Facebook Page: <https://www.facebook.com/MATERIAIS2017/>

SABIO – SCHOOL IN ADVANCED BIOMATERIALS, A SATELLITE EVENT OF MATERIALS 2017

- Under the auspices of the UT Austin | Portugal International Collaboratory for Emerging Technologies, the School in Advanced Biomaterials took place on April 9, at Montebello Hotel in Vista Alegre, Ílhavo, in the scope of Materials 2017 event.

SABio was a one-day science school designed to provide an intensive teaching and knowledge exchange on cutting-edge topics in the fields of smart biomaterials, drug delivery, nanomedicine, biofabrication, tissue engineering and personalized medicine. The latest advances and new ideas on Materials were shared and discussed in a stress-free atmosphere.

SABio program included tutorials, presentations and interactive debates that were held, during the morning, by prominent experts in the fields of advanced biomaterials, therapeutics and technologies. During the afternoon was time for informal networking and small group discussions on specific issues identified by delegates and a general sum up session closed the day.

Maria Helena Fernandes, Maria Ascensão Lopes, Helena Florindo and Pedro Granja were part of the organizing Committee.

The School in Advanced Biomaterials was part of the Materials 2017 event, an International Conference that was held, from April 9 to 12, at the University of Aveiro, Portugal. The event shared the latest breakthroughs, achievements and views in the field of Materials.



Prof. Paula Vilarinho spoke at the Welcoming Session of SABio
Credits: University of Aveiro



About 50 students and researchers attended to SABio
Credits: University of Aveiro

THE GROUP OF PROMINENT SPEAKERS OF SABIO INCLUDED:



Nicholas A. Peppas
University of Texas at Austin, USA
Institute for Biomaterials, Drug
Delivery and Regenerative Medicine



Pamela Habibović
Maastricht University, NL
MERLN Institute for Technology-
Inspired Regenerative Medicine



Paulo Bartolo
The University of Manchester, UK
School of Mechanical, Aerospace
and Civil Engineering



Ronit Satchi-Fainaro
Tel Aviv University, Israel
Department of Physiology and
Pharmacology, Sackler School of
Medicine



Jonathan Knowles
University College London, UK
Eastman Dental Institute;
Faculty of Medical Sciences



João Mano
University of Aveiro, Portugal
Department of Chemistry

SCHOOL IN ADVANCED ELECTRON MICROSCOPY, A SATELLITE EVENT OF MATERIALS 2017

- Under the auspices of the UT Austin | Portugal International Collaboratory for Emerging Technologies, the School in Advanced Electron Microscopy took place on April 9, at the University of Aveiro, in the scope of Materials 2017 event.

The School in Advanced Electron Microscopy was designed to provide an intensive teaching and knowledge exchange on cutting-edge topics in the field of electron microscopy, in particular scanning – transmission electron microscopy, electron energy loss spectroscopy and in situ electron microscopy. This was a one-day science school where the latest advances and new ideas were shared and discussed in a stress-free atmosphere.

The program included tutorials, presentations and interactive debates that were held during the day by prominent experts in the fields of advanced electron microscopy, therapeutics and technologies. There was time for informal networking and discussions on specific issues identified by delegates and a general sum up session closed the day. About 50 students and researchers attended to the School in Advanced Electron Microscopy.

Leonard Francis (INL) and Paula Vilarinho (University of Aveiro) were part of the organizing Committee.

The School in Advanced Electron Microscopy was part of the Materials 2017 event, an International Conference that was held, from April 9 to 12, at the University of Aveiro, Portugal. The event shared the latest breakthroughs, achievements and views in the field of Materials.



Prof. Paulo Jorge Ferreira lectured on the topic “Seeing is Believing: The Beauty of In Situ Transmission Electron Microscopy”
Credits: University of Aveiro



Prof. Patricia Carvalho talked about the “Transmission electron microscopy and electron diffraction”
Credits: University of Aveiro

THE GROUP OF PROMINENT SPEAKERS INCLUDED:



Paulo Jorge Ferreira
Full Professor at the University of Texas at Austin, USA and Director of the Electron Microscopy facility at the Texas Materials Institute



Raul Arenal
ARAID Researcher, Research Group: MAGNA; The Institute of Nanoscience of Aragon (INA)



Patrícia Almeida Carvalho
Senior Scientist, SINTEF Materials and Chemistry, Oslo and tenured Professor of Material's Engineering, Instituto Superior Técnico, University of Lisbon (absentee leave)



Pedro M. da Costa
Assistant Professor, Material Science & Engineering, Physical Science and Engineering Division, King Abdullah University of Science and Technology

SPHERE ULTRAFAST PHOTONICS APPOINTED MARKET TECH, INC. HAS FIRST USA-BASED DISTRIBUTOR

- The portuguese startup working with the UTEN-Portugal program, dedicated to the design and manufacture of ultra-fast technology, has chosen a company from California, EUA, as their first USA-based distributor.

Sphere Ultrafast Photonics, enrolled in the UTEN-Portugal Global Startup Program, specialized in precision monitoring and measurement control of Ultrafast Lasers (UFL) and Femto-second Lasers (FSL) used in research, medtech, bio/pharma industrial processing and nano-materials production, announced the appoint of their first USA-based distributor, Market Tech, Inc. (MTI) of Scotts Valley, California, to provide sales, technical support and service in North America for all Sphere products.

Sphere Ultrafast Photonics, a Portugal-based growth company, was founded in September of 2013 by Hélder Crespo and Rosa Romero from the University of Porto, Portugal, and by Anne L'Huiller, Miguel Miranda, Cord Arnold and Thomas Fordell from Lund University, Sweden. This portuguese startup is devoted to world-class ultrafast pulsed laser solutions, providing its customers with products that highly improve the performance of femto-second laser applications. Sphere Ultrafast Photonics has patented a series of novel optical pulse measurement solutions that dramatically improve the stability, optimization and consistent performance of ultra-fast, femto-second laser applications. Sphere's novel products measure, test and automate complete control of high performance lasers by assuring stability and robustness, delivering the shortest set up time for labs and commercial users.

Market Tech, Inc. is a leading distributor and sales company of Lasers and Measurement Instrumentation for Life Science, Medical, Metrology, Aerospace, Quality Control and Research Applications based in Scotts Valley, California. The company offers a wide variety of Gas, Solid State, Diode and Fiber Lasers covering UV, visible and IR Spectrum. MTI also offers photodetectors, laser power meters, spectrophotometers, light and color instruments for display measurement and fiber optic products.

"We're very impressed with the quality team and reputation of MTI in the photonics space as we expand our market reach into the USA. We look forward to working with Market Tech to engage more labs and industrial clients who would like to gain significant production improvement out of their lasers whether that's in their labs or on their production lines", said Rosa Romero, one of the founders of Sphere Ultrafast Photonics, about this recent partnership.

UTEN-Portugal program, a component of the UT Austin | Portugal program, works to develop globally competitive and sustainable S&T commercialization know-how in Portugal, through partnerships and deal-making during a 12 month program engagement. The Global Startup Program began in 2013 with the mission to provide business development, soft-landing, incubation, and acceleration opportunities to Portuguese technology-based companies. The selected companies have the opportunity to work with a team of experienced professionals in order to make them grow in global markets.

"Here at the University of Texas at Austin and our UTEN-Portugal Program, we are exciting for Sphere Photonics as one of the rising starts in our Portuguese cohort whom we have helped coach and mentor in this year's UTEN-Portugal program", praised Chris Meyers, Tech Commercialization Advisor at McCombs Business School.



Sphere manufactures instrumentation using the d-scan technique, a new technology for the simultaneous measurement and compression of ultrafast pulses
Credits: Sphere Ultrafast Photonics

FOR MORE INFORMATION PLEASE CONSULT:

<http://www.laserfocusworld.com/articles/2017/06/market-tech-to-distribute-sphere-ultrafast-photonics-measurement-instrumentation.html>

SPHERE ULTRAFast PHOTONICS

Website: <http://www.sphere-photonics.com>

MARKET TECH, INC.

Website: <http://www.markettechinc.net/>

UTEN-PORTUGAL / UNIVERSITY OF TEXAS AT AUSTIN

Website: <http://www.utenportugal.org>

CONGRATULATIONS TO OUR DIGITAL MEDIA ALUMNI MARTA FERRAZ!

- **Marta Ferraz, a PhD Digital Media Graduate, under the UT Austin | Portugal Program, has accepted a position at the European Space Agency as a Researcher/Engineer in Automation and Robotics. We wish her all the best luck!**

“If we can pinpoint a moment during our human life course that dramatically shapes our nature, we must mention our infancy. At that singular moment, science fiction movies made my days. Robots, spacecrafts, and weird non-human creatures, among other fictional phenomena, fed my imagination without precedent. Those abstractions lead me into the most “interesting” experiments, including disassembling a washing machine in order to try to build a “ghost trap” or dissecting fish to figure out a mechanism for bringing them back to life.

Time kept flowing and I turned into a young adult. By that time, my curiosity led me to explore every detail about child development. During that age transition, I had a car accident that prevented me from teaching children – my occupation at the time - for more than a year and a half. This was the time I started learning about human augmentation. I had a full titanium bone implementation in my left arm and a hand that required full nerve and movement rehabilitation.

During my recovering time, I was still able to drive using a single arm! At that time, I enrolled in a postgraduate course focused on exercising and health and suddenly felt a strong push to find more and more about the developing human body.

On one step further, I started a master’s degree at the Faculty of Human Kinetics, focused on understanding how the human body grows, matures and develops,



Marta Ferraz working with robotic exoskeletons at ESA

and its relation to non-organic machines such as computers and robots. I entered the world of computing and artificial intelligence.

Professor Antonio Câmara invited me into a Ph.D. program in Digital Media. A scholarship by the Foundation for Science and Technology allowed me to freely research for six years, asking questions about technological augmentation during early human development and developing operating methodologies in response to them. My argument is that the human biological condition should be enhanced during earlier stages of development when biological plasticity is at its peak. It is precisely at this stage that the structural and functional mechanisms of the human body take shape.

Taking into account the previous argument and that human biological augmentation is a necessary condition to adapt to extreme environments, such as off-Earth environments, a segment of my Ph.D. work was devoted to this topic. This novel vision raised great interest from the AI and Space Exploration scientific communities. Quickly I was invited to share my vision with scientists from NASA - National Aeronautics and Space Administration - and ESA - European Space Agency.

After my Ph.D., in 2016, I was hired for a position at ESA, at the ESTEC, Automation and Robotics Department in the Netherlands. This job gives me the opportunity to contribute to space exploration

missions via robotic machines, for example, in low Earth orbit (LEO), on the moon and on Mars. I work in collaboration with an exceptional team of scientists and developers from different backgrounds and institutions such as NASA and the Canadian Space Agency, among others. I'm truly honored to be part of ESA's team and to contribute to the future of space exploration and human survival.

My life path brought me to a deeper questioning of the human biological nature and its relation to the Universe(s).

What can I say? Dreamers. They never learn.”



The ideas begin with being illustrated. Later they are tested in the Nature – the space where Marta Ferraz gains inspiration

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FOR MORE INFORMATION ABOUT MARTA'S WORK: <http://atomicdesigners.wixsite.com/anszamoti>

UT AUSTIN WELCOMED THREE EXPLORATORY VISITORS IN APRIL

The Digital Media Program in Austin hosted three short term exploratory student visits: António Baía Reis, Roberto Vaz and Süse Ribeiro.

António Baía Reis, a Digital Media PhD student at the University of Porto, visited UT Austin last April. His doctoral research is focused on Immersive Journalism and its eventual interdisciplinary entanglements with areas such as Virtual, Augmented and Mixed Realities, Multisensory Technologies, Innovation in News, Audience and Reception Studies and Cultural & Social Awareness.

During his stay in Austin, António met with his doctoral co-supervisor, Prof. R. B. Brenner, and together they have outlined a plan for a future research visit in Fall 2018. As a future visiting researcher, António will focus on advancing his literature review, gather insights from US scholars and professionals within the fields of digital media and journalism, participate and observe the UT Austin's ongoing projects related to his research interests, as well as attending the Immersive Media Production course with Prof. Deepak Chetty.

Furthermore, António had several meetings with faculty members such as Prof. Sharon Stover, Prof. Nancy Schiesari and Prof. Rosental Alves, providing him with rich insights about certain UT Austin's academic dynamics in relation to his research interests. He attended and participated in ISOJ 2017, as well as the Iberian American Colloquium on Digital Journalism, but also an Immersive Media Production class with Prof. Deepak Chetty.

Additionally, and considering António's background and professional experience as both an actor and jazz pianist, he also explored Austin's arts & cultural scene. To maintain a health study-life balance, António expects to do some acting and musical gigs while in Austin.



António Baía Reis, U. Porto PhD Digital Media Student

Roberto Vaz, a PhD Student in Digital Media at University of Porto, was also in Austin last April doing a 10 day exploratory visit.

During this time, he had several meetings with Professors from the Moody College of Communication (Prof. Nancy Schiesari and Prof. Sharon Strover) and with Professor Randolph Bias, from the School of Information, to discuss some ideas about his research project.

His research aims to design a multi-sensory environment for a museum, in order to enhance exhibition's accessibility, especially for the blind and visual impaired visitors. He also visited some museums, in order to try to understand if he could develop part of his research in any of those institutions, in the future.

During his stay at Austin, he also participated at ISOJ 2017 - International Symposium on Online Journalism.



Roberto Vaz, U. Porto PhD Digital Media Student

Süse Ribeiro, from the University of Porto, is a Digital Media Doctoral Student with expertise in Acoustic Engineering, Performing Arts, as well as the Visual Arts. She visited Bruce Pennycook at the Butler School of Music (College of Fine Arts) and the Center for Arts and Entertainment Technologies.



Süse Ribeiro, U. Porto PhD Digital Media Student

PhD Conclusions

ANA CABRAL MARTINS (FCSH/UNL)

Thesis title: Cinema in the Age of Digital Technology: A new Architecture of Immersion

The starting point of my PhD dissertation was actually the conclusion of my own Masters thesis project, titled *Overlap and the Cinematographic Experience* (2009), where I explored the “overlap” as a method of duplication or repetition as – employed in films like *Pulp Fiction* (Quentin Tarantino, 1994) and *Elephant* (Gus Van Sant, 2003) – in order to introduce new perspectives and, therefore, new layers to the narratives. As a technique that creates repetition, the overlap can also produce the unfolding (i.e., to “open or unwrap the folds of; to spread open; to expand”) of a narrative through several distinct elements, oeuvres or mediums. I perceived this “unfolding” movement as a fitting metaphor for the Hollywood film industry’s synergistic corporate structure and its preference for cinematic narratives that can be outspread through different media platforms. This development of tiered narratives intrinsically implies a process of multiplication of narrative layers, which, coupled with the digital advent, results in the development of cinematic narratives that expand through diverse media platforms and ancillary markets – which is a subject Henry Jenkins touches upon in *Convergence Culture* (2006), one of the main inspirations for my PhD project.

So my main goal, throughout my thesis, was to, essentially, consider the contemporary, Hollywood-driven, entertainment landscape as a Wagnerian “total work of art” where both narrative and technology acted in unison, “unfolding” in different mediums to create a metaphorical architecture that fostered the immersion of contemporary audiences and spectators. In order to track down, historically, the alignment of the necessary elements that permitted such a synergistic and concentrated effort, one of the key objectives of my dissertation was producing an overview of the Hollywood film industry from the end of the studio system, in the late 1940s, to the contemporary advent of digital technology, at the turn of the century. My research focused on the analysis of three fundamental elements of the Hollywood film industry: the process of conglomeration of the Hollywood film industry and how its industrial and new technological structures function as encouragement towards corporate synergy and media franchising, following the need to strengthen the market position of film companies after the studios were no longer vertically integrated; the deepening dependence on



blockbusters of the Hollywood film industry as a way to dominate the global market, the continued reliance on film franchises and the emergence of a new “shared-universe” blockbuster model; and, finally, digitization and its effects on home video distribution and digital content delivery, which, in turn, distressed how media and films, in particular, are consumed and experienced. This “anytime, anywhere” technology furthers the notion that media content has transformed into an enveloping force not longer constricted by mere physical boundaries. All these elements point to a contemporary culture, writ large, that is increasingly devised as an over-arching, all-encompassing architecture of immersion, where everything is connected.

As a result from my work in this PhD thesis, I believe that I’ve made interesting contributions to a deeper knowledge of contemporary film culture, specifically as a way of understanding, in an interconnected fashion, the various aspects that have been establishing the structure of our cultural landscape, with Hollywood cinema as its cornerstone. I also view this work as a starting point, not only in the sense that it opens up paths for future research and exploration, but also because it offers a way of thinking about the place of cinema as something that inhabits broader industrial, economic and cultural spheres. Hopefully my research can encourage new ways of examining topics ranging from legislation that affects the financing, distribution and exhibition of films and associated materials, to the economic structures that support these three aspects (such as distribution windows and the permanence of cinematographic content), as well as concerns connected to the preservation of filmic material, specifically regarding the accelerated obsolescence of digital technologies.

UPCOMING EVENTS

■ WORKSHOP - IMMERSIVE MEDIA: PRODUCING VR DOCUMENTARIES IN UNITY 3D

Digital Media Summer Institute 2017

Date: June 5-16, 2017

Venue: FCSH/UNL, iNOVA Media Lab

Speaker: Simon Quiroz (UT Austin)

■ CREATIVE COLAB' 17

The 2nd Seminar on Creative Collaboration, an initiative by students of the Digital Media Doctoral Program, is an invitation to explore and discuss various perspectives on Digital Media, intersecting creativity and collaboration. This year's theme is Digital Citizenship, unfolded along three vectors: technology, communication and media.

Date: June 12-16, 2017

Venue: UPTEC PINC and U. Porto Media Innovation Labs

Webpage: <https://www.facebook.com/creativecolab.up/>

■ WORKSHOP - INTRODUCTION TO DIGITAL HUMANITIES RESEARCH

Digital Media Summer Institute 2017

Date: June 19-23, 2017

Venue: U. Porto Media Innovation Labs

Speaker: Daniel Carter (UT Austin)

■ WORKSHOP - THINKING ABOUT PRESERVING DIGITAL CULTURE: WHAT TO PRESERVE AND HOW

Digital Media Summer Institute 2017

Date: June 26-28, 2017

Venue: U. Porto Media Innovation Labs

Speaker: Patricia Galloway (UT Austin)

■ WORKSHOP - ENTREPRENEURIAL JOURNALISM: INNOVATION AND CREATIVITY TO ADAPT TO THE NEW MEDIA ECOSYSTEM

Digital Media Summer Institute 2017

Date: July 3-7, 2017

Venue: FCSH/UNL - iNOVA Media Lab

Speaker: Rosental Alves (UT Austin)

■ WORKSHOP - IMMERSIVE MEDIA: PRODUCING AUGMENTED REALITY FOR STORYTELLING PROJECTS

Digital Media Summer Institute 2017

Date: July 10-14, 2017

Venue: FCSH/UNL - iNOVA Media Lab

Speaker: Ben Bays (UT Austin)

■ WORKSHOP - UNDERSTANDING PERSUASIVE ENVIRONMENTAL COMMUNICATION AND IMAGERY

Digital Media Summer Institute 2017

Date: July 10-14, 2017

Venue: U. Porto Media Innovation Labs

Speaker: Lucy Atkinson (UT Austin)

More information about the Digital Media Summer Institute 2017 workshops at:

http://utaustinportugal.org/news/digital_media_summer_institute_2017

<http://inovamedialab.org/training/>

https://mil.up.pt/utap_summerinstitute/

ONGOING OPPORTUNITIES

■ PHD COURSE IN DIGITAL MEDIA

Institution: FCT/UNL

Application Dates:

1st Phase: from April 7 to June 23, 2017

2nd Phase: from August 26 to September 10, 2017

3rd Phase: To be announced

More information at: <http://www.fct.unl.pt/ensino/curso/doutoramento-em-media-digitais>

■ PHD COURSE IN DIGITAL MEDIA

Institution: U. Porto

Application Date:

3rd Phase: from June 30 to August 7, 2017

More information at: <https://dei.fe.up.pt/pdmd/en/applications/>

■ CALL FOR PAPERS – ICIDS 2017 – 10TH INTERNATIONAL CONFERENCE ON INTERACTIVE DIGITAL STORYTELLING

This year, the International Conference on Interactive Digital Storytelling will take place in Funchal, Madeira Island, Portugal, and be hosted by the Madeira Interactive Technologies Institute. ICIDS welcomes contributions from a large range of fields and disciplines related to Interactive Storytelling. Original contributions are encouraged in the forms of research papers, position papers, posters and demonstrations, presenting new scientific results, innovative theories, novel technological implementations, case studies and creative artistic projects in the field of Interactive Digital Storytelling and its possible applications in different domains. ICIDS particularly welcome research on topics in the following five areas: Brave New Ideas, Theoretical Foundations, Analyses and Evaluation of Systems, Storytelling Technologies and Usage Scenarios and Applications.

ICIDS 2017: November 14 – 17, 2017

Venue: M-ITI

Call for Papers – Submission Deadline: June 23, 2017

More information: <http://icids2017.m-iti.org/>

COLABSQUARE

MORE OPPORTUNITIES can be found at FCT website: <http://www.fct.pt/concursos/>

USEFUL LINKS

www.utaustinportugal.org

www.fct.pt

www.utexas.edu

www.ic2.org

www.ati.utexas.edu

www.austin-chamber.org

www.utenportugal.org

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