



MSCA COFUND DOC2AMU
31 Doctoral Programme
1st Call for Applications



CALL FOR APPLICATIONS : DOC2AMU 2017 THESIS PROJECTS

Opening of the first call for applications to Aix-Marseille University's DOC2AMU doctoral programme!

Early-stage researchers and Master degree holders, you have until April 10th, 2017 to submit your application to undertake a doctoral thesis with the COFUND DOC2AMU programme at Aix-Marseille University (AMU). The programme will allocate 30 3-year contracts within the 3 calls for applications launched until 2018 (one call for applications per year).

Based on principles of interdisciplinarity, intersectorality and international openness, the thesis projects offered within these calls for applications relate to one of six research axes:

- Networks*
- Big data*
- Globalization*
- Nano-health*
- Climate change*
- Imaging*

This year, 24 projects are published in the Call for Candidates:

- *Temporal Networks: From Network Theory To Brain Science*
- *Hydro-economic modelling of the North western Saharan aquifer system*
- *Multiphase Reactivity Of Polyfunctional Organic Nitrates In The Atmosphere : MULTI-NITRATES*
- *Imaging Cytoskeletal Filament Organization At The Molecular Scale*
- *Transformation And Mobility Of AI Nanomaterials In The Environment*
- *Indicators In Risk Management: A Fresh Perspective Between Hazard Analyses And Societies' Response*
- *Tackling The Noninvasive Assessment Of Muscle Energetics And Oxygen Consumption Using A Metamaterial-Based Double-Tuned Radio-Frequency Coil*
- *In Vivo CARS Microscopy For Biomineralization Study Of Foraminifera*
- *Functional Spinal Cord Characterization Using Ultra-High Field Magnetic Resonance Imaging And Biomechanical Finite Element Modelling (SC UHF/FEM)*
- *Characterizing Brain Networks In Real Time Across Frequencies Based On A Combination Of Time Frequency And Source Localization Methods*
- *Language Underpinnings Of Conversational Interpersonal Dynamics (LUCID)*
- *Laser-Induced Forward Transfer For Modelling Skeletal Muscle Physiopathology*
- *Neural Mechanisms Underlying The Interlimb Transfer Of Motor Learning*



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- *Cell Mechanics Regulation By Cytoskeleton Dynamics: Combined Atomic Force And Optical Microscopy*
- *Innovative Optics To Unveil Brain Activity At Unexplored Scales*
- *Critical Raw Element Bio-Extraction (CELEBEX)*
- *Reproductive Toxicity Of Combusted Diesel Additive Nanoceria*
- *New Generation Of Nano High Energy X-Ray Probe For Radiography, Radiotherapy, Instrumentation And Fundamental Physics (X-R2P2)*
- *Control Of Hybrid Systems Based Heat Pump And Using Renewable Energy*
- *Imaging Of Bone Diseases In Children Using Ultrasonic Computed Tomography*
- *Functionalized-Cucurbit[N]Urils: Advanced Drug Carriers*
- *Quantitative Biology, Immunology, Chemotaxis, Intracellular Signaling Regulation, Protein Printing*
- *Hypersecretion In Severe Airway Diseases: An Integrated Biophysical Approach Of The Mucociliary Aspect Of The Bronchial Epithelium*
- *Digital Printing Of Organic Solar Cells Using Non Fullerene Acceptors*

Find all the useful information about the programme and the thesis projects you can apply to directly on the website: <http://doc2amu.univ-amu.fr/en/current-calls>

You can also ask your questions to the DOC2AMU programme management team from this website.

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APPEL A CANDIDATURES POUR LES PROJETS DE THESE DOC2AMU 2017

Ouverture du deuxième appel à candidatures aux projets de thèses du programme doctoral DOC2AMU d'Aix-Marseille Université!

Jeunes en dernière année, ou diplômés, de Master, jeunes chercheurs, vous avez jusqu'au **10 avril 2017** pour soumettre votre dossier de candidature afin de réaliser votre thèse de doctorat dans le cadre du programme COFUND DOC2AMU à Aix-Marseille Université (AMU). Pour information, le programme allouera 30 contrats doctoraux, d'une durée de 3 ans chacun, au cours des 3 appels à candidatures lancés jusqu'en 2018 (1 appel à candidatures par an).

Basés sur des principes d'interdisciplinarité, d'intersectorialité et d'ouverture internationale, les projets de thèse proposés dans le cadre de ces appels à candidatures portent sur l'un de six axes thématiques :

- Les réseaux
- Le big data
- La mondialisation
- La nano-santé
- Le changement climatique
- L'imagerie

Cette année, 24 projets sont publiés dans le cadre de l'appel à candidatures :

- Temporal Networks: From Network Theory To Brain Science
- Hydro-economic modelling of the North western Saharan aquifer system
- Multiphase Reactivity Of Polyfunctional Organic Nitrates In The Atmosphere : MULTI-NITRATES
- Imaging Cytoskeletal Filament Organization At The Molecular Scale
- Transformation And Mobility Of Al Nanomaterials In The Environment
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- Hypersecretion In Severe Airway Diseases: An Integrated Biophysical Approach Of The Mucociliary Aspect Of The Bronchial Epithelium
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Retrouvez toutes les informations utiles sur ce programme et les projets de thèses auxquels vous pouvez postuler directement sur le site <http://doc2amu.univ-amu.fr/en/current-calls>

Vous pourrez également poser toutes vos questions à l'équipe de management du programme DOC2AMU depuis ce site.

DOC2AMU est un programme doctoral cofinancé par le Conseil Régional PACA et la Commission Européenne dans le cadre des actions H2020 COFUND Marie-Skłodowska-Curie GA n°713750, avec un soutien financier de la part de la fondation A*MIDEX.