https://signalife.univ-cotedazur.fr/

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Keywords
Development, Neurosciences
Cell Biology and Physiology
Genetics and Epigenetics
Cellular reprogramming
Signal transduction
Immunity, Stress, Aging
Stem cells, Pathogens, Cancer
Obesity, Diabetes, Modeling

Numbers
€11 million (project 2012-2019)
€4.3 million (project 2020-2024)
52 research teams (see reverse)
6 institutes : C3M, iBV, IPMC, IRCAN, ISA, Inria
6 sites in Nice & Sophia Antipolis
7 Institutions : Inserm, CNRS, INRAE, UCA, Inria, Nice Hospital and CAL Anti- Cancer Center
550 members, 230 researchers

Platforms
Animal housing
Photonic microscopy
Genomics and bioinformatics
Human Biobank/Anatomopathology/Histology
Biomolecular Analysis
Flow Cytometry

Awards (2012-2019)
8 ERC Grants
8 CNRS Medals, 1 IUF
1 Inserm Prize,1 EMBO Member
7 Académie des Sciences Prizes
5 Académie de Médecine Prizes
4 Fondation pour la Recherche Médicale Prizes

Publications (2013-2019)
471 articles
91 (20 %) IF>10
233 (49 %) IF>5

Presentation

The "SIGNALIFE" research program was selected by the French Ministry of Research and Education as part of the highly competitive "Laboratoire d'Excellence" (Labex) call for proposals, within the framework of the 2011 "Investments for the Future" government initiative.

The SIGNALIFE Labex was awarded 11 million euros over an 8-year period, starting in March 2012. The extension project received an additional 4.3 million euros for a further 5 years (2020-2024). SIGNALIFE aims to develop a research network between six leading academic research institutes in Nice. The project will contribute to establishing an interactive network of regional institutes in the life sciences, focused on the study of signaling pathways in animal and plants, essential to our understanding of human health and fundamental biological processes.

Labex organization

Labex SIGNALIFE is hosted by Université Côte d'Azur (UCA) and brings together roughly 40% of its life sciences workforce. The extension project is coordinated by Dr. Pierre Abad, INRAE Research Director at the Institut Sophia AgroBiotech.

SIGNALIFE is composed of 6 research institutes : Centre Méditerranéen de Médecine Moléculaire (C3M), Institut de Biologie Valrose (iBV), Institut de Pharmacologie Moléculaire et Cellulaire (IPMC), Institute for Research Cancer and Aging, Nice (IRCAN), Institut Sophia Agrobiotech (ISA) and the Institute for Digital Science and Technology (Inria). Since 2016, it has been part of the UCAJedi Initiative of Excellence (IDEX).

Research

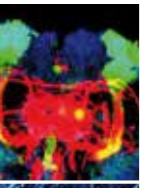
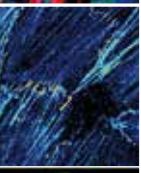
The SIGNALIFE project is organized into 5 main scientific axes

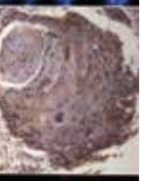
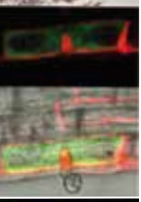
1. Cellular architecture of signaling pathways
2. Plasticity and Signaling
3. Stress Signaling
4. Signaling in aging and disease progression
5. New principles in signaling and application

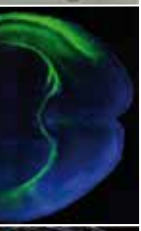
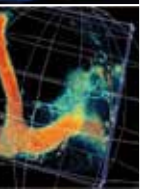
Project

Labex SIGNALIFE, initial project (Director S.Noselli: 2012-2019). The aim here was to build up a strong and competitive educational program. We established a successful and highly selective international PhD program leading to the recruitment of 73 PhD students (36 nationalities, 84% from abroad).

Labex SIGNALIFE, extension project (Director P. Abad: 2020-2024). This 2nd period is focused on developing two specific actions: 1) basic science: we plan to recruit new high-profile group leaders in emerging topics related to all SIGNALIFE scientific axes through competitive calls for five Chairs of Excellence; 2) innovation: we plan to promote Startup creation with five Young Entrepreneur Programs.

Abad : Plant nematode interactions
Antonny : Dynamics of lipid membranes and protein coats
Arkowitz : Polarized growth in yeast
Auberger : Cell Death, Differentiation and Cancer
Ballotti/Bertolotto : Biology & pathology of melanocytes from skin pigmentation to melanomas
Barbry : Physiological Genomics of the Eukaryotes
Bardoni : RNA Metabolism and Neurodevelopmental Disorders
Besse : Post-transcriptional control of Neuronal Plasticity
Boyer : Microbial Virulence and Inflammatory Signaling in Disease
Braendle : Gene-environment interactions in development and evolution
Braud /Anjuère : Immune regulation at muco-cutaneous surfaces
Chaboissier : Sex determination in Mice
Collombat : Diabetes Genetics
Cristofari : Retrotransposon and genome plasticity
Dani : Stem cells and differentiation
Delaunay : Circadian System Biology
Descombes : Computational Morphometry & Morphodynamic of Cellular & Supracellular Structures
Feral : Epithelial homeostasis and tumorigenesis
Franco/Luton : Arf proteins, cell morphology and membrane transport
Frendo : Symbiosis and the Redox State of the Cell
Fürthauer : Membrane Trafficking and Developmental Signalling in Animal Development
Gilson : Telomere, Senescence and Cancer
Glaichenhaus : Immunology System, Brain and Peripheral Nerves
Gouzé : Biological Control of artificial ecosystems
Gual : Hepatic complications in obesity
Harayama : Metabolism and Functions of Membrane Lipids
Hofman : Carcinogenesis-related chronic active inflammation
Hubstenberger : Epi-transcriptomics
Hudry : Cellular Sex and Physiology
Hueber : Death receptors signaling and cancer therapy
Lalli : Mechanisms of gene regulation in physiopathology
Lambeau : Molecular physiopathology of phospholipases A2 and their mediators
Liti : Population genomics and complex traits
Marie/Barik : Physiopathology of Neuronal Circuits and Behavior
Martin : Sumoylation in Neuronal Function and Dysfunction
Nahon : Genomics and Evolution in Neuroendocrinology
Noselli : Epithelial morphogenesis and left-right asymmetry in *Drosophila*
Panabières : Plant-oomycete interactions
Poirié : Evolution and Specificity of Multitrophic Interactions
Rauzi : Morphogenesis and mechanics of epithelial tissues
Ricci : Metabolic control of cell deaths
Romero : Developmental timing, Environment and Behaviors
Röttinger : Embryogenesis, Regeneration and Longevity
Schedl : Molecular programs controlling development and tissue homeostasis
Shkreli : Telomerase and adult stem cell homeostasis
Studer : Development and Function of Brain Circuits
Tanti/Cormont : Cellular and Molecular Pathophysiology of Obesity and Diabetes
Tartare-Deckert/Deckert : Microenvironment, signaling and Cancer
Thérond : Signal Transduction and Control of Morphogenesis in *Drosophila*
Trabucchi : Control of Gene Expression
Van Obberghen-Schilling: Adhesion Signaling & Stromal Reprogramming in the Tumor Microenvironment
Yvan-Charvet : Metabolism and Cancer