

Apply online until **May 31st 2015**

Depending on their previous experience, students may apply to the Master 1st or 2nd year. After evaluation of their written applications, candidates have a personal interview before admission to the AIV Master program.

All M1 and M2 courses are taught in English, as many students from around the world enter the AIV Master every year.

Open doors at the CRI

check our website for the schedule

www.cri-paris.org/master-aiv

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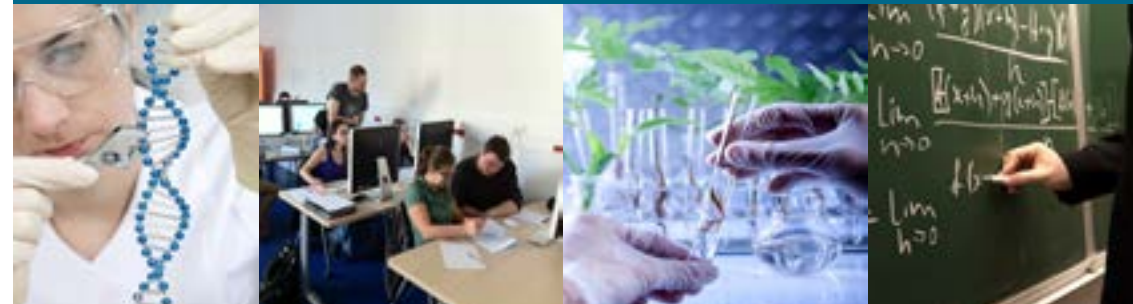
Centre for Research and Interdisciplinarity (CRI)

10 rue Charles V - 75004 Paris - France

Master Interdisciplinary Approaches to Life Science

cursus Bettencourt

Master of Science



«None of us is as smart as all of us»



Master 1

The 1st year of the AIV Master is the first M1 in France to teach systems biology and synthetic biology. Your training will be at the interface of life sciences and physics, mathematics and computer science.

Apart from systems and synthetic biology, you will discover methods of mathematical modelling, statistical analysis and as well state-of-the-art technologies (fluorescence microscopy, nano-fabrication, molecular forces measurements, etc.) used to quantify the properties of living systems. You will also gain skills in scientific communication and may want to participate in external modules to acquire or strengthen a specific knowledge.

In the second M1 semester, you will “learn through research”, following an internship in a laboratory of their choice in the Paris area or by participating in the iGEM Paris-Bettencourt team at the MIT international synthetic biology competition. Our iGEM team is the first French team to participate and is singled out each year, including winning the 2013 world championship.

1st semester courses

Bootcamp
Systems Biology
Synthetic Biology
Dynamics of Living Systems
Computational Biology
Experimental Methodology
Statistics for System Biology
Science & Medicine

2nd semester

Scientific Communication
Interdisciplinary Seminars

5 months internship
or iGEM competition



Master 2

During the 2nd year, you will deepen your knowledge of life sciences, develop your ability to critically analyze scientific works and discover the Research world. Two tracks are offered: (I) general interdisciplinary track for students who wish to develop their knowledge in various interfaces with Life Sciences, (II) SSB track for students who wish to further their knowledge in systems and synthetic biology.

The M2 year consists of a one week workshop along with the FdV 1st year PhD fellows. In small groups, you will learn how to create interdisciplinary research projects. This is followed by weekly Friday afternoon courses, throughout the year, geared to develop the students' capacities to read and analyze current scientific articles. The remainder of the M2 curriculum is devoted to research, through three internships, with at least one theoretical internship and one experimental internship.

For those willing to pursue in a PhD program, the last semester will give them the opportunity to prepare a thesis project.

3rd & 4th semesters

Project writing workshop
Critical analysis of research articles

Bibliography project
Scientific debate and development of thesis project

Systems Biology
Synthetic Biology

3 research internships

The CRI



AIV courses are held at the heart of Paris, in the Center for Research and Interdisciplinarity (CRI). The CRI encompasses : the AIV-sister master program Foster EdTech - forming the Interdisciplinary Approaches to Research and Education (AIRE) master cursus; the Bettencourt Frontiers in Life Sciences (FdV) undergraduate and doctoral programs as well as the OpenLab. The CRI is an ideal environment for exchanges among students and associate researchers. Starting 2014, the CRI innovative programs are part of the “Learning Science” UNESCO Chair.



The CRI also hosts student-lead scientific clubs in which AIV students take part: synthetic biology, science & development, artificial intelligence, neurobiology, networks, information and web... The students have seminar rooms, a fully equipped computer room, a dedicated library and a lounge at their disposal.



Many French and foreign researchers (Harvard, MIT, Weizmann, Stanford, VU Amsterdam, CNRS, Paris Descartes, Paris Diderot, Curie, ENS, INSERM) are participating in the activities of the CRI, through courses, seminars, workshops and conferences, providing a permanent link between students and the research world.

Questions ?



How to apply for admission to the AIV program?

Online application on our website is followed by evaluation, pre-selection and interview sessions (either in Paris or through web communication). After admission, registration takes place either at Paris-Diderot or Paris-Descartes Universities. Prospective candidates should not hesitate to contact us and are most welcome to visit us and attend AIV sessions and CRI seminars.



Backgrounds of students entering the AIV Master's program?

The AIV master program is interdisciplinary: students come from many disciplines (biology, physics, medicine, mathematics, chemistry, computer science, philosophy, cognitive science...), from different backgrounds (universities, medical schools, engineering schools students and graduates...) and countries (>15 nationalities/year). What matters to us is your motivation and your interest for science.



What do AIV students do after completing the AIV program?

More than 80% follow a PhD program either in France or elsewhere (CNRS, INSERM, INRA, INRIA, Rockefeller, Harvard...) ; others work for the industry.