Centre de Recherches Interdisciplinaires
Tour Montparnasse
33, avenue du Maine
75015 Paris

FdV PhD
Room 21.18

http://cri-paris.org/doctoral-school-fdv/
Dear FdV PhD Student,

We are happy to welcome you to our PhD program. This booklet summarizes most of the courses and opportunities offered by our program. Its goal is to guide you through the year and help you make the most out of it. Together, we will make sure that your time spent at the Center for Research and Interdisciplinarity in Paris is exciting and productive.

The FdV PhD Team
6. **Required FdV trainings**

Requirement 1: Creating Interdisciplinary Research Projects Workshop
Requirement 2: Interdisciplinary Fridays Seminars
Requirement 3: Critical Analysis of Research Articles
Requirement 4: Oral Communication and Public Speaking
Requirement 5: Thematic Workshops
Requirement 6: Written scientific communication
Requirement 7: Well-being, integrity, and responsibility in research

7. **À la carte” Courses**

7.1 Technical and teaching courses
7.2 Transversal courses
7.3 DIY your PhD curriculum

8. **Important Contacts**

8.1 FdV PhD Program contact
8.2 FdV Support and CRI contacts
8.3 Other CRI programs
8.4 Paris Descartes University Contacts
8.5 Paris Diderot University Contacts
1. About the FdV program

The “Frontières du Vivant” (FdV) PhD program, established in 2006, is part of the “Programme Bettencourt” created and funded by the Bettencourt-Schueller Foundation to help creative and talented students develop their PhD in an environment as enriching as those of the best graduate programs in the world. It is one of the 32 doctoral schools hosted at the Sorbonne Paris Cité University (USPC). The disciplines covered by the doctoral school are broad and include natural sciences, engineering and technology, medical and health sciences, and social sciences.

1.1 Students

The FdV graduate school recruits outstanding students trained in various disciplines from around the world.

After an initial preselection, students are interviewed by the International Scientific Committee that selects and attributes funding to the candidates interviewed and ranked by the International Scientific Committee. The main criteria for selection of students are:

- Strong background in at least one of the disciplines relevant to their research project
- Quality and originality of the research project in view of its interdisciplinarity
- Proven interest in interdisciplinarity and the FdV PhD program

Students admitted to the program have:

- A Masters degree or equivalent; this typically includes 5 years of higher education, or contributions to scientific publications.
- Proposed an interdisciplinary PhD project only
- Hosted in the laboratory in the Paris region
- Doctoral funding

1.2 Research

The aim of this interdisciplinary doctoral school is to promote ambitious research projects involving interactions between a wide range of academic disciplines in
the pursuit of understanding living systems, education, and discovery. The research can be broadly categorized into two main topics: life sciences and education/discovery, which is referred to as the New Frontiers.

**Life sciences**

Since the creation of the FdV doctoral school in 2006, the aims were focused on life sciences. Traditionally, students have pursued interdisciplinary research projects in natural sciences, engineering and technology, medical and health sciences. Recently, projects in the life sciences have incorporated approaches and/or applications from other disciplines including the social sciences and humanities, however the focus of the work is on advancement of knowledge in life science. As of August 2017, over 130 PhDs have been granted to FdV fellows studying topics at the frontiers of life science, and over 100 are currently in pursuit of their degree.

**Education and discovery**

Starting in 2014, the FdV PhD program began hosting projects at the frontiers of learning and discovery. New Frontiers PhD projects aim to expand collective intelligence and contribute to the solutions to global challenges through original research investigations. These projects often sit at the interface of art & design, digital technology, education, and science, however this is not strictly mandatory. For example, past projects have involved learning with games, teaching through research, communication technologies, participatory science, art/design as a means to communicate science, etc.
2. **FdV Program guidelines**

The FdV guidelines are based on the five-year project (2014-2018) of the doctoral school approved in 2013 by the AERES, the French evaluation agency for research and higher education.

2.1 **FdV spirit**

The pedagogic FdV program is focused on the active participation of the PhD students in their own education at the frontiers of knowledge. The FdV program fosters an environment of cooperation and excellence that enables students to develop their potential as young researchers. The program enables labs to host unconventional theses, with respect to their usual doctoral school, to participate in an interdisciplinary community, and to take advantage of resources made available by the doctoral school through their students.

2.2 **Thesis Research Projects**

FdV PhD theses make a significant contribution to an interdisciplinary domain through an original research investigation. The following are necessary conditions for a PhD thesis in the FdV doctoral school:

- Make a significant contribution to an interdisciplinary domain
- Conduct an original research investigation, in which the question, problem, and/or methodology are novel
- Pose a research question or problem that is relevant to the interdisciplinary community
- Apply an appropriate research methodology that reveals the knowledge generated by the research outcome and/or processes
- Document and disseminate the research outcome and/or processes in an appropriate manner to the research community and the wider public

Ultimately, the PhD supervisor, Thesis Advisory Committee, dissertation reviewers, and defense jury provide the guidance and evaluation of content and execution of the thesis research.

**Subject matter**

A wide range of research aims are associated with the FdV doctoral school due to the interdisciplinary nature of the program. They can be broadly categorized into two main topics: Life Sciences and New Frontiers.
Life Sciences

These projects advance knowledge in life science through an original research investigation. Traditionally, students have pursued interdisciplinary research projects in natural sciences, engineering and technology, medical and health sciences, and recently, projects have also incorporated approaches and applications from the social sciences and humanities.

New Frontiers

These research projects expand collective intelligence and contribute to solving global challenges through original investigations. They are often at the interface of art & design, digital technology, education, and science, however this is not strictly mandatory. For example, past projects have involved learning with games, teaching through research, communication technologies, participatory science, art/design as a means to communicate science, etc.

2.3 Admission to the PhD program

Applications to the FdV doctoral school are first reviewed by an preselection committee to determine eligibility for the program. Next, eligible candidates must present themselves and their PhD project for evaluation by the International Scientific Council (ISC). Students who are deemed eligible by the ISC will be invited to enroll in the doctoral school provided they have secured doctoral funding. Fellowships for the doctoral school are awarded according to the candidate’s ranking after the interviews and the available financial resources. The hosting labs are committed to support and facilitate the participation of their FdV PhD students in the doctoral training program.

PhD Funding

All PhD students must have doctoral funding for three years. Since the graduate school is not able to support all the eligible candidates, students and their supervisors are encouraged to apply for funding available from other institutions and organizations. In most cases, funding is issued to the student through the university. However, it is also possible to have an agreement between the university and any funding provider such that the student’s stipend is issued to him/her from the funding provider directly. In either case, all students must have explicit funding for his/her doctoral studies.

University registration

FdV students must be registered with either Paris Descartes University or Paris Diderot University for every year of their PhD studies. At the beginning of each
academic year, all students must complete the registration process, as registration does not automatically renew from one academic year to the next. The administrative registration deadline is in mid November of each year. The exact deadlines can be found on the Paris Descartes University or Paris Diderot University websites.

The PhD diploma is issued by Université Sorbonne Paris Cité (USPC), not by the doctoral school. Thus it is imperative that students are registered, otherwise the diploma and student benefits cannot be granted.

2.4 Training program

The FdV PhD Program offers an extensive doctoral training program that combines research with a curriculum of advanced courses and workshops on interdisciplinary research, science-related topics and transversal skills for scientific and nonscientific professions. The interdisciplinary nature of students’ interests and projects requires a broad set of skills and knowledge. students are required to validate at least 300 hours of academic training including advanced, interactive training sessions, student-led scientific clubs, workshops, and conferences before the thesis defense is granted.

At least half of this training should be earned through FdV courses, workshops, and other activities organized by the Center for Research and Interdisciplinary (CRI). The remaining hours may be validated through courses taken at other institutions in France and abroad, massive open online courses (MOOC), international meetings and summer schools, teaching activities, etc. upon prior approval from the FdV staff.

Required FdV Trainings

A number of FdV courses are mandatory for each student to complete before the end of their third year of studies. These courses aim to develop the transversal skills necessary in the research community such as scientific communication, interdisciplinary collaboration, and responsible research practices. They include:

• Oral communication
• Critical analysis of research articles
• Written communication
• Well-being, integrity, and responsibility in research

Additionally, to foster scientific communication and community building in the FdV doctoral school, students are expected to participate in the following student seminars and workshops throughout their studies.
Creating Interdisciplinary Research Projects

The FdV/AIV Creating Interdisciplinary Research Projects (CIRP) workshop assembles free spirited students and researchers from broad academic backgrounds to conceive creative research projects at the interface of Life Sciences and/or Education. The five day workshop attempts to provide the primary basis for collegiality and communication through dialogue and brainstorming on open interdisciplinary research questions. To encourage collaboration and sharing, student teams will present their proposals and ideas in a number of formats throughout the week.

Interdisciplinary Thursdays

During their first year, students will give a short presentation to a general audience to introduce their research project, the main issues, and approaches. Because these presentations are held in front of an audience of student researchers from a variety of backgrounds, this is an effective training for accessible communication. These seminars are intended to promote discussions and scientific exchange among the students and to build the interdisciplinary scientific community.

Thematic Workshops

The second year presentation occurs during the thematic workshops, which groups FdV and AIV students according to specialized areas of expertise. Each student group collaborates to host a day-long academic conference in which they present their work, invite experts to give specialized talks, organize collective activities, etc. While the type of presentation may take many forms, e.g. powerpoint/slides, poster, group presentation, demonstration, etc., the aim is for more advanced and specialized research discussions between students, invited members of their lab, outside researchers, etc.

International Conferences

Students must also participate in at least two international workshops/conferences during their thesis to maximize the visibility of their work and develop contacts for their scientific projects. To this aim the program provides up to 1000 euros per year per student to help cover the expenses for attending international workshops and conferences.

Additional funding resources are available for conference travel through Paris Descartes and Paris Diderot universities. Students should contact Antoine Tesniere for more information on this university funding.
Annual Training Report

The doctoral school monitors the academic progress of the PhD students through the annual training report, which is an editable document shared between each student and the FdV staff. At the end of the academic year, students must submit a training report where they document the courses and training hours accrued during the year. Hours will be validated by the FdV staff according to the following guidelines:

- Hours from approved FdV courses will be validated if student attended at least 80% of the course, or upon instructor approval
- Hours from approved FdV activities will be validated upon approval from staff of the program
- Hours from external activities will be validated with proper documentation of completion, e.g. attestation letter from conference organizer, certificate of completion for a MOOC, etc.

The annual training report will be reviewed by the FdV staff before university registration or the thesis defense can be granted.

2.5 Thesis advisory committee

The Thesis Advisory Committee (TAC) follows the student throughout their PhD. Its role is to ensure the progress of the research, with respect to the original aims and in the light of new advances in the field, and the general well being of the student. The TAC consists of the PhD supervisor(s) and two senior scientists (tutors) of complementary expertise to cover the different interdisciplinary facets of the student’s project. To ensure that students receive broad and unbiased feedback, the tutors should work outside of the supervisors’ labs and should not be past or present collaborators of the supervisor. The TAC tutors are selected by the student and should be approved by the PhD supervisor before final approval from the FdV staff.

The PhD student meets with the TAC members at least once per year. The first meeting should take place six months after the start of the PhD. Because this meeting occurs relatively quickly after the start of the PhD, the purpose of the first TAC meeting is not necessarily to present results, but to evaluate the current stage of the research and further develop the plan for the coming year. The subsequent meetings should take place no more than one year apart such that the last meeting takes places approximately six months before the thesis defense.

Before each meeting, the student submits a written progress report to the members of the TAC using the following guidelines:
TAC Report Guidelines

In order to prepare the discussions at the meeting the document should also address the following questions:

- What were the most important results since the last meeting (or since the beginning of the PhD for first year candidates), in terms of scientific achievements and progress in your work?

- Were there changes in the project since the last meeting (or since the beginning of the PhD for first year candidates)? If so, what was the cause of the changes and/or delay and what was the response to this?

- What were the principal difficulties encountered? What measures of actions have been undertaken in response? In addition, the PhD candidate should also take advantage of the TAC report to include questions on issues they would like to address during the meeting.

First year report guidelines - 5 page report

For first year candidates the report is intended to be an updated thesis project (~5 pages). It should be structured as a research proposal and should discuss the existing experimental and theoretical bases of the subject and preliminary results.

Second year report guidelines - 10 page report

The second year summary should grow to an intermediary summary (~10 pages) including scientific context, the aims, results, conclusions and perspective on the remaining work to be done.

Third year report guidelines - 20 page report

Building on the previous documents, the third year summary (~20 pages) aims to provide an outline of the thesis manuscript.

TAC meeting and Tutors Report

During the meeting, the progress of the PhD work is discussed and the TAC provides advice and criticism on the proposed research plan for the next year(s). The TAC will also advise the student on scientific and career issues and on the choice of conferences and training courses.

The TAC members are expected to complete the tutors report with feedback for the student on his/her research progress, plan, and training program. Copies of the student’s TAC report and tutors report should be submitted to the doctoral school with the end of the year training report. See the TAC meeting guidelines section for more details.
2.6 Criteria for doctoral degree

The PhD at the FdV program represents a combination of research experience gained in the hosting lab and experience in interdisciplinary science and education related activities gained through the doctoral school training program.

Approval to defend the thesis is granted by the doctoral school director. The director will consider the following: the Thesis Advisory Committee recommendations, research achievements, publications or dissemination of the work in the thesis, and completion of the doctoral school training program including courses, conferences, and involvement in the FdV doctoral program. The defense criteria rely on the quality of the thesis manuscript, the doctoral training, experience gained during the thesis, and the capacity to defend within three years.

The doctoral school does not require a determined number of publications to authorize the defense. However the research processes and outcomes should be documented and disseminated in an appropriate manner to the research community and the wider public such that future investigators could build upon it.

The doctoral school recommends that the students are involved in three publications/presentations of their work during their thesis:

- One research article written with the lab, not necessarily as lead author, and not necessarily on the student’s main subject
- One review type article, taking advantage of the work of interdisciplinary synthesis expected by the school
- One research article as lead author on the student’s main subject

For students who have components of their thesis work in a discipline where peer refereed publishing is not common (e.g. Art, Design), the doctoral school recommends that the students disseminate their work in venue appropriate for their field. These venues may include international conferences, interactive demonstrations, exhibitions, etc.

In addition to wider dissemination of the work, students are expected to document their research progress in written Thesis Advisory Committee reports and present the state of their research to their TAC committee annually. The final outcomes and process are documented and presented in the final PhD dissertation and defense. While other media is permitted to accompany the dissertation, a written document is mandatory for completion of the PhD.

The doctorate degree is awarded after examination of the candidate’s work by two reviewers and defense in front of the doctoral jury. Neither reviewer can be affiliated with Université Sorbonne Paris Cité (USPC), and at most one of the reviewers can be a member of the TAC committee. The composition on the de-
The defense jury has the possibility to deliver the doctorate with one of the following grades: (a) “honorable” (b) “très honorable”, (c) “très honorable avec félicitations.” The highest grade, “très honorable avec félicitations,” is reserved for candidates with exceptional skills proven by their achievements and the quality of their thesis defense. This grade can be awarded only if there is a unanimous agreement of the thesis jury members under an anonymous vote and the jury president writes and signs an additional report justifying this distinction (this report is distinct from the thesis defense report).

2.7 Duration of the thesis

PhD students in the FdV Doctoral School are expected to finish their PhDs in three years. Extensions are only granted under exceptional circumstances and need the approval of the Thesis Advisory Committee and the director of the doctoral school. Extensions will only be considered if funding is available. Students must submit a fourth year registration request form to the FdV office and follow the required procedure of the university to which he/she is registered.

Defense procedure and deadlines

Students must defend their thesis by 30 November of their third year. Ideally, students will defend in September or early October. The defense procedure must be initiated before 15 July.

If students have been grated a fourth year, they must defend by 30 November at the end of fourth year. The fourth year defense procedure must be initiated by 30 September.

2.8 Post-thesis preparation and follow-up

The FdV program will provide training and assistance to help students and alumni initiate a successful professional career after the PhD.

When publications related to the PhD work are accepted before or after the defense, the FdV school should be informed to maximize the visibility of the students achievements. FdV alumni will be featured on the doctoral school’s web site to facilitate contact between current students and alumni. To keep the strength of the FdV community, alumni will be invited to various FdV scientific events and are encouraged to participate in and maintain an FdV alumni network.
2.9 Signatures and acknowledgments

Signature regulations of the hosting lab and employer must be respected. In particular, students holding a “contrat doctoral” fellowship with university funds must include following affiliations on their publications:

1. Funding university (Paris Descartes or Paris Diderot), Sorbonne Paris Cité, Paris, France.

2. University/Institute where the PhD takes place (if different from the funding university), lab name, unit label (e.g. CNRS UMR, INSERM U), post code, city, country.

Holders of a “contrat doctoral” paid from non university funds (case of convention between an external payer organism and the university) only have to mention in the signature the university where the PhD takes place.

Due to the financial support they receive, FdV students are also expected to rightfully acknowledge, their funding organisms and the “Ecole Doctorale Frontières du Vivant (FdV) – Programme Bettencourt.”

2.10 Website representation and student network

At the beginning of their PhD, students are asked to sign a photo release form giving the CRI permission to use photos and/or videos of the themselves on the CRI website and other promotional materials. Photos and videos include those provided by the student for their student profile page and those from CRI events/courses where photos and videos are taken. Student are are not obligated to grant photo/video permission, and may opt out of the photo release at any time by submitting a new photo release form to the FdV office indicating that they do not grant permission for the CRI to publish photos/videos featuring the student. In this case, the CRI staff will do their best to remove existing photos and videos from published materials, but cannot guarantee that everything is removed immediately.

Student website profile

The FdV staff will create a basic academic profile page for each student on the FdV website. The page will contain the thesis title, abstract, supervisor, hosting lab, funding source, and photo of the student. This information will be taken from the original FdV application. Students may update their profile content at any time by emailing the FdV office with the necessary changes.

CRI Moodle

FdV students may contact other FdV students, alumni, CRI students, and partners through the CRI Moodle. Students will be given a login to the Moodle at the beginning of their PhD which will give them access to a number of resources and forums.
2.11 Scientific ethics and responsible conduct

Ethical behavior is expected during the course of the PhD. This includes originality and reproducibility of the results generated and confidential treatment of privileged communications.

The financial support by the doctoral school (to attend conferences and workshops), yearly registration renewal at the university, and authorization to defend are conditional upon the respect of the present guidelines (e.g. organization of the yearly TAC meeting, attendance to mandatory courses, realization of approximately 100 hours training per year).
3. Thesis advisory committee guidelines

The Thesis Advisory Committee (TAC) meeting are meant to help the FdV candidate progress, to plan the project for the forthcoming year, and to promote scientific exchange. They aim to summarize and analyze the research results obtained thus far, which will provide the basis for discussing and drawing up a research plan for the coming year. During the meetings the PhD candidate should give a 30 minute talk followed by a discussion about the progress of the PhD. The tutors can give advice on measures to be taken with regard to supervision and/or education and training. They are asked to evaluate the candidate’s progress and express recommendations in their tutors report.

3.1 Tutor selection

The TAC consists of the PhD supervisor(s) and two senior scientists (tutors) of complementary expertise to cover the different interdisciplinary facets of the student’s project. The tutors should work outside of the supervisors’ labs and should not be past or present collaborators of the supervisor. The TAC tutors are selected by the student and should be approved by the PhD supervisor before final approval from the FdV director of studies.

First year FdV students must submit the selection of their TAC committee members within 1 month of start their PhD. We recommend that you share these TAC meeting guidelines with your tutors so they can familiarize themselves with the TAC process. Please indicate your selection of your TAC members using the Tutors Selection Form available on the FdV website.

3.2 Thesis Summary Report (TAC Report)

At least one week before the meeting, the PhD candidates should send a summary of their research (TAC Report) to the TAC members. The document should address the following:

- What were the most important results since the last meeting (or since the beginning of the PhD for first year candidates), in terms of scientific achievements and progress in your work?
- Were there changes in the project since the last meeting (or since the beginning of the PhD for first year candidates)? If so, what was the cause of the changes and/or delay and what was the response to this?
- What were the principal difficulties encountered? What measures of
Thesis advisory committee guidelines
The Thesis Advisory Committee (TAC) meeting are meant to help the FdV candidate progress, to plan the project for the forthcoming year, and to promote scientific exchange. They aim to summarize and analyze the research results obtained thus far, which will provide the basis for discussing and drawing up a research plan for the coming year. During the meetings the PhD candidate should give a 30 minute talk followed by a discussion about the progress of the PhD. The tutors can give advice on measures to be taken with regard to supervision and/or education and training. They are asked to evaluate the candidate’s progress and express recommendations in their tutors report.

3.3 TAC Meeting and Tutors Report

The PhD candidate is responsible for organizing the TAC meeting with the tutors and the thesis supervisor(s). External guests can be invited. The first meeting should occur 6 months after the beginning of the PhD and then every year thereafter. Because the first meeting occurs relatively quickly after the start of the PhD, its purpose is not necessarily to present results, but to evaluate the current stage of the research and further develop the plan for the coming year.

During the meeting the PhD candidate gives an oral presentation (30 minutes) of the research project, during which, specific scientific problems can be addressed. The candidate is invited to bring to the meeting his/her lab books, in order to be able to answer questions and get more precise feedback on experimental and theoretical work.

Following the general discussion, the tutors should meet with the student separately without his/her supervisor(s). Then, the tutors should meet with the supervisor(s) without the student present. The tutors should then deliberate alone, during which time they will discuss and summarize their views and formulate their recommendations. The tutors should use the Tutors Report Form to give the student feedback on the presentation, research progress, and PhD training. All responses must be typed in English and signed by the tutors. The Tutors Report Form is available for download on the FdV website. The comments are then discussed in group the group.

After the TAC meeting, the PhD candidate needs to sign the tutors report and collect the signatures from the tutors. Handwritten signatures are preferred, but electronic signatures will be accepted. The students must send the (i) the thesis summary, and (ii) the TAC meeting report in PDF format to the doctoral school through the online platform.
3.4 Submission of TAC Reports

FdV students are expected to submit their TAC report and tutors report to the FdV doctoral school. The TAC documents should be uploaded to the Google Drive folder with the annual training report by the 1st of July. Please see the section on the annual training report for details on accessing the Google Drive folder. Additionally, students should periodically visit the FdV website and check his/her cri-paris.org email for any changes to the submission process.

3.5 TAC Budget

In order to encourage the exchanges between the PhD candidate, the TAC members and possible guests on the day of the TAC meeting, a budget of up to 200€ is available from the doctoral school for lunch. For reimbursement the candidate should return the receipt and invoice (with the name of the participants) to the FdV office. Please see the procedures for more details on how to use the TAC budget.
4. Annual Training Report

FdV students may earn their 300 hours of training in a number of ways including FdV and external courses, workshops, conferences, teaching, CRI activities, etc. At the end of the academic year, students are expected to report all of their training hours to the FdV doctoral school through the Annual Training Report.

Once the report is completed, FdV staff will validate the hours, record overall progress, and provide feedback on the training.

4.1 Online Training Report

Each student has a Google drive folder that is shared with the FdV staff. Students can access their folder by logging into Google Drive with their cri-paris.org email address.

The Google Drive folder should be used to upload the annual report documents which include:

- Training Report (Google Spreadsheet document, template already loaded into folder)
- Supplementary documentation for validation of external trainings
- TAC report
- Tutors report

Additional documentation is required for validation of external courses, workshops, conferences, etc. Documentation may include a certificate of completion, attestation letter, registration receipt, etc. Documentation is not necessary for required for FdV courses where attendance was taken and reported to the FdV staff. Once the training report is completed, the FdV staff will review the documents and provide feedback to the student.

The training reports should be completed and all accompanying documents uploaded to Google Drive by the first of July.

4.2 Hours validation

Fifty percent of the training hours should be done through FdV approved activities, e.g. FdV courses, CRI workshops, Les Savanturiers, Game Lab, Open Lab, CRI Summer Schools, etc.
Generally students must attend 80% of FdV courses in order to validate the hours. In the case that a student cannot meet the requirements for validation, he/she is encouraged to talk to the FdV staff and course instructor to make alternative arrangements. In some cases, the number of hours a student validates will come directly from the course instructor.

The remaining training hours can be earned through external courses and workshops, international scientific conferences, teaching, etc. Typically journal clubs, research group meetings do not count towards FdV training hours. Please do not hesitate to contact the FdV team with questions about validation of training hours.

Students will report all of their training hours in the Annual Training Report which is due the first of July. Training reports will be validated by the staff during the summer months.

University registration or thesis defense in the following fall will be authorized only after students complete their Annual Training Report.
5. Important Procedures

5.1 University registration

Every student is required to register with their designated university (Paris Descartes or Paris Diderot) every academic year. Registration is not renewed automatically after the first year.

At the beginning of the academic year, September, students will receive an email from the doctoral school with the steps needed to register with the university. Students will need to make an appointment with the university and go to the university in person to complete the registration. After completed, students will need to send proof of their registration to the FdV office.

Students must complete the university registration by the deadline indicated in the email from the doctoral school. Failure to register by the deadline could result in dismissal from the doctoral school.

5.2 CRI Paris email address

First year students are assigned a cri-paris.org email address at the start of the academic year. The email address is managed by Google Apps for Education and comes with 30 GB of storage in the Google Apps (e.g. Gmail, Google Drive, Calendar, etc.). The account is free for students of the CRI and can remain active even after the student graduates. All email communication from the doctoral school will be done through the cri-paris.org email addresses.

Students will receive instructions on how to activate the account at the beginning of the year. Please contact the IT department (it-team@cri-paris.org) with questions or problems with the account.

5.3 CRI Moodle

First year students will automatically be added to the CRI Moodle, an online platform with important information about CRI programs and forums for wide communication with students, teachers, and staff of the CRI.

FdV students should visit the FdV News and Info Page of the Moodle for answers to common questions, documents, and procedures, before asking the FdV staff.
All student also have access to a number of forums on the Moodle including the General CRI forums that send notifications to the entire CRI community, and the FdV forums which only notify people associated with the FdV PhD program.

5.4 FdV course registration

Course registration is done using Google Classroom, which students can access using their cri-paris.org email address. Students must register for each course they wish to take, including the required courses.

To register, students must visit https://classroom.google.com and log in with their cri-paris.org email address. Next click the + in the top right corner of the screen and click Join Class. Enter the course code to join the course.

The 2017-2018 courses are briefly described later in this handbook and in more detail on the FdV website. The registration codes for all courses are given on the FdV website:

http://cri-paris.org/doctoral-school-fdv/academic-program/fdv-courses/

5.5 TAC Meeting

Student are responsible for scheduling and organizing their TAC meetings themselves. There are no set time slots or locations where the meetings must take place. Students are welcome to schedule their TAC meeting at the CRI, but arrangements must be made with FdV staff in advance.

FdV students have an annual budget of 200 euros for their TAC meeting. This budget should be used for lunch after the TAC meeting with the committee and/or refreshments during the meeting.

After the TAC meeting, students can submit their expense documents to be reimbursed for their approved TAC expenses up to 200 euros. The reimbursement procedure is listed below. The TAC report written by the student and tutors report completed by the TAC committee should be uploaded to the Google Drive system with the Training Report at the end of the academic year.

5.6 FdV travel budget

FdV PhD students have an annual budget of 1000 euros for conference travel and accommodations.1 Before using any of the FdV budget, students must re-

---

1 Each year, the 1000 euro budget must be approved by the director of studies. The financial support is conditional upon the respect of the FdV guidelines (e.g. organization of the yearly TAC meeting, attendance of mandatory courses, completion of a ~100 hours training per year).
receive approval from the director of studies, which they can obtain by sending an email to the director of studies (CC the scientific coordinator) and explain how the budget will be used and how the purchase is relevant for the training program. Life science students should contact David Tareste for approval, and New frontiers students should contact Antoine Tesniere for approval. Once approved, students may make the purchases. After returning from the conference, students may submit their reimbursement documents according to the procedure below.

**Students who do not receive approval to use the travel budget prior to attending the conference will not be reimbursed.**

### 5.7 Reimbursement

Reimbursements are simple and generally only take a few weeks after they are submitted.

**Documents needed**

- SCIRE Expense Report signed by one of the Directors of Studies
- Original receipts for purchases
- RIB (Relevé d’Identité Bancaire)

The SCIRE Expense Report is available for download on the FdV News and Info Page of the Moodle.

**Procedure**

1. Complete the SCIRE Expense Report with signature from David Tareste or Antoine Tesniere (note: electronic signatures are acceptable)
2. Attach your original receipts and/or invoices
3. Send your expense report, receipts, and RIB to Tien Clabaut: tien.clabaut@cri-paris.org
4. Wait 1-2 weeks for the reimbursement to be deposited into your bank account

You may not necessarily receive an email from Tien about the progress of your reimbursement even though it is being processed. If you do not receive your deposit 2 weeks after submitting the reimbursement, you may follow up with Tien by email or phone (see contacts section at the end of the handbook).

It is possible to get a cash advance by SCIRE in the case of travel expenses (not applicable to hotel expenses or seminar entrance fees). In this case, we will purchase your ticket but we must use a travel agency, which sometimes requires time and management costs, and may thus increase the price of your ticket.
If is also possible to have conference registration fees paid in advance if the conference organizer sends an invoice to the CRI with the exact amount owed by the student for registration. Students should contact the conference organizer to find out if they can issue an official invoice. Invoices should be addressed to Tien Clabaut and should clearly state the name of the student, amount, and conference details.

5.8 Request for defense

Deadlines

Students must defend their thesis by 30 November of their third year. Ideally, students will defend in September or early October. The defense procedure must be initiated at least 8 weeks before the intended defense date. If students plan to defend in September or early October, the process must be initiated before 15 July to account for the university closure from mid July-August.

If students have been granted a fourth year, they must defend by 30 November at the end of fourth year. The fourth year defense procedure must be initiated by 30 September.

Process

To initiate the defense procedure, students must complete the Request for Thesis Defense Form and the University Jury Approval Form (available on the FdV Moodle) and return it to the doctoral school.

Paris Diderot and Paris Descartes Universities have different defense procedures, please check the respective university web page for the exact steps. The links to each page are available on the FDV moodle.

5.9 Fourth-year registration

PhD students in France are expected to finish their PhD in 3 years. Extensions are only granted under exceptional circumstances. Each application for a fourth year needs to be discussed with the school management. Prolongation in a fourth year can only be granted by the University President, upon proposal by the director of the PhD program and motivated letter of the supervisor(s).

In order to approve your fourth-year registration students should provide the FdV staff the following:
• An application letter written by the student explaining the request for registering in fourth year. The letter should detail the advancement of the thesis. There is no format requirement for the letter.

• A letter should also be provided by your supervisor(s).

• The approval of the thesis advisory committee, either written statement in the TAC report, or motivated letter signed by the tutors.

• Completed FdV Fourth Year Prolongation Request form, available on the FdV New and Information Page of the Moodle.

• Completed official university request form (in French), available from the university web page

• A formal proof of your fourth year funding

• Third year TAC and tutors reports and training report

Fourth year registration is completed at the same time as regular registration, September-November.
6. **Required FdV trainings**

In total, FdV students must complete 300 hours of training during the three years of the PhD studies. Included in those 300 hours, are the following required courses/workshops:

**First year requirements**
- Creating Interdisciplinary Research Projects
- Interdisciplinary Friday Seminars
- Oral Communication and Public Speaking
- Critical Analysis of Research Articles

**Second year requirements**
- Thematic Workshops

**Requirement to be completed anytime before the end of the PhD**
- Written communication
- Well-being, integrity, and responsibility in research

In keeping with the spirit of the FdV program, the required courses are designed to develop the transversal skills necessary for the research world. While we strongly recommend that all students take the courses above, we understand that in some cases students have already completed similar trainings or have found alternative means to develop the particular skills. In this case, students should contact the FdV staff to customize their curriculum plan.

**Course registration and cancellation**

Students must register for each course they wish to take, including the required courses, on Google Classroom using their cri-paris.org email address and the Google Classroom Registration code. Students will be notified when registration opens and closes at the beginning of the academic year.

At the end of the registration period, the course list will be transferred to the instructors for course planning. If an inadequate number of students register for a course at the end of the registration period, the course may be canceled.

If students need to cancel their course registration, they must remove themselves from the Google Classroom page at least 2 weeks prior to the start of the course. If students are registered for a course but do not attend, they may lose their annual travel budget.
Requirement 1: Creating Interdisciplinary Research Projects Workshop

Objective: The CIRP workshop intends to assemble free spirited students and researchers from broad scientific backgrounds to conceive creative research projects. This workshop provides the primary basis for collegiality and communication through dialogue and brainstorming on open questions in interdisciplinary research project. The specific aims are:

• To be able to focus on an important scientific question and to define the means to approach it from different disciplines.
• To be able to zoom out (have a broader view) and zoom in (be precise and define the key experiments).
• To think and express your ideas more clearly.
• To gain confidence in your ideas.
• To be able to discuss, reject or accept ideas.
• To learn to take constructive scientific criticisms.
• To learn how to write a research proposal.
• To discuss scientific questions thoroughly.
• To learn to interact with people from different backgrounds.

Coordinator: AIV and FdV Teams
Contact: masteraiv@cri-paris.org and fdvphd@cri-paris.org
Organization: One week intensive workshop in September

Requirement 2: Interdisciplinary Thursdays Seminars

Objective: The Interdisciplinary Thursday seminars aim to provide an overview on a wide scope of interdisciplinary research in life sciences and education. They are intended to promote discussions and scientific exchange among the fellows and senior scientists and develop an interdisciplinary scientific community. Each session consists of 2 short talks (~15 minutes) aimed at a general but scientific audience by first year FdV students introducing their research question and experimental/theoretical strategy followed by a discussion. The student should present the general scientific questions addressed in his/her lab and then focus on his/her specific research work.

Coordinator: Maria Molina Calavita
Contact: maria.molinacalavita@cri-paris.org
Organization: Every other Thursday from October-June
Requirement 3: Critical Analysis of Research Articles

Objective: The CARA course is intended to train students to improve the critical reading of interdisciplinary research papers and to introduce them to the different aspects of the peer review process.

Students will be exercised on their ability to capture rapidly the content of a paper, including conceptual framework and technical aspects. Several aspects of the methodology to perform this task efficiently as well as retaining the content of papers will be discussed with the instructors. Emphasis will be put on analyzing methodological aspects and the writing of method sections, with illustrations and comparisons between different articles. Examples of seminal work involving methodological breakthrough will be presented and discussed. Finally, scientific misconduct leading to ethical issues will be exemplified and analyzed.

The course will also exercise and lead students through all critical steps of the peer review process, the tasks of Editors and board, the writing of appropriate reviews and will include some aspects of paper submission (e.g., the writing of a cover letter). Examples will be given of crosstalk between reviewers and authors with the support of available transparent reviewing process provided by particular journals. Editorial issues will culminate with a special session with an Editor of AAAS (Science Magazine).

Course format: an introduction session will take place a couple of weeks before the course in order to detail the objectives, optimize the organization of working groups, give instructions on preliminary work and introduce a selection of pertinent papers illustrating the specific issues fitting the objectives of the course. The course will then take place for 3-4 full consecutive days in order to allow students to fully concentrate on tasks and optimize the outcome of working in small groups.

Instructors: Benoît Sorre
Contact: benoit.sorre@univ-paris-diderot.fr
Organization: Tentatively 3-4 full days in February-March with introduction session a few week prior

Requirement 4: Oral Communication and Public Speaking

Requirement objective: Oral communication and public speaking are essentials for scientists and researchers to master. These courses aim to help students effectively communicate their research in a variety of settings.
To meet this requirement, students may take one of the three following courses:
• General Public Speaking - intended for students with lower proficiency in En-
English or who are not comfortable speaking in public
• Engaging presentations for the scientific and general audiences - intended for students with higher proficiency in English and who already have some experience giving presentations in English

General Public Speaking

Objective: The main objective of the course is to (re)discover the tools for an effective and adapted oral communication. This 2-day workshop is designed to help young scientific researchers develop their communication skills, with the primary focus on presentations before small and large groups. Working from self-evaluation of their skills and objectives, participants will receive hands-on training in effective techniques in public speaking in academics, including physical preparation (stage presence, voice, non-verbal communication, branding), organization (structure, materials), content (convincing, storytelling, etc.), audience involvement, and the particular problems of presenting in a foreign language. Participants should prepare some of their past and current presentations for activities in day 2.

Pedagogic Objectives
• To stimulate interaction
• To manage stage fright
• To encourage effective listening
• To develop an individual presentation style
• To use the body language
• To create effective support materials
• To optimize the preparation

Process
• Experimentations to understand the communication basis
• Actors’ techniques to manage the emotions and the verbal/non verbal aspect of public speaking
• Exercises to develop listening, adaptation and attention
• Suggestions to master relationship
• Techniques to manage the group dynamics
• Theory

Instructor: Ray Horn
Contact: ray.horn@free.fr
Organization: One day per week for 3 weeks in November-December
Engaging presentations for the scientific and general audiences

In this course students will improve their skills to delivering research talks that engage their audience and get their message across. This course is still under development and details will be communicated to students at the start of the academic year. Possible topics include:

- Presenting a clear message
- Enjoying the presentation process
- Adapting his/her message to the audience and to the allotted time frame
- Differences between scientific and general audiences
- Explaining complex subjects using visual aids
- Responding to questions from the audience

Instructor: Maria Molina Calavita
Contact: maria.molinacalavita@cri-paris.org
Organization: Tentatively 2-3 full days in November

Requirement 5: Thematic Workshops

Objective: The thematic workshops give FdV, AIV, and EdTech students an opportunity to conceive and organize a workshop to showcase their research and interests in an interdisciplinary and open setting. The workshops aim to create a setting for discussion and exchange amongst PhD students, Masters students, and the scientific community at large.

FdV PhD students in Life Science and New Frontiers, AIV M2, and EdTech M2 students work together to create the thematic workshops week at the CRI. The students decide on themes then register to the thematic club corresponding to the main theme of their PhD research or M2 internship. The students have the opportunity to organize each component of the thematic workshop, including format, guest speakers, scheduling, advertising, etc. A budget is available to the clubs for invitations of external scientists to participate in the workshop and interact with the students.

M2 students are expected to present and defend their research internship before a panel of M2 teachers. The FdV students must also present their PhD research in the format of their choosing. All presentations should be aimed for a general, scientific audience and should be connected to the theme of the day. They should include an introduction to the basic scientific concepts that define the project, an overview of the latest scientific knowledge in this area, and a clear description of the scientific questions that the project is going to address and how these fit into the wider picture of understanding biological systems.
During the mandatory intro session, details of the workshop organization will be presented and collectively decided by the group. Students will select the themes and join the workshop they wish to attend.

Coordinators: 2nd year FdV students, AIV M2, and EdTech M2 students with help from FdV, AIV, and EdTech coordinators
Organization: Introduction workshop in December and one week intensive workshop in April

**Requirement 6: Written scientific communication**

Requirement objective: Written communication is essentials for researchers to master. These courses aim to help students effectively communicate their research process and findings.

To meet this requirement, students may take one of the following courses:
- Scientific writing
- Population science communication

**Scientific Writing**

Objective: The course promotes clarity, fluidity, conciseness, and organization in scientific writing. Students will learn to write fluidly to maintain the attention of the scientific reader.

Based on the book Scientific Writing 2.0: a Reader and Writer’s guide, the course promotes clarity, fluidity, conciseness, and organization in scientific writing. The trainer looks at the scientific writing style through the lens of human factors. To be reader-friendly, course participants write with the reader scientist in mind (and especially the reviewer and editor). They use checklists and open-source assessment tools (SWAN, etc) to control the quality of their figures and of their manuscript’s title, abstract, introduction, structure, conclusions and references. They learn how to write fluidly to maintain the attention of the reader.

Course outline:
Introduction: Write to be read – a reader, reviewer, and editor perspective. How to avoid the writing pitfalls that make the memory-bound, attention-bound, time-bound, and knowledge-bound reader stumble.

Module 1: The “Why” and the “How” of elements of the standard scientific paper structure: title, abstract, introduction, body (headings, subheadings, tables and graphs), conclusion, and references.

Module 2: Elementary principles of composition: reaching clarity, conciseness,
organization, precision and fluidity in writing to support the scientific contribution and be accepted for publication.

Module 3: Identification of writing problems: a walk through process to detect fluidity problems at sentence and paragraph level.

The participants bring to the course a published paper they have written or read and are familiar with. No review, no short letter. The paper should have informative headings and subheadings. At the end of the course, the participants will know clearly how to improve their writing and their paper.

During an optional half-day session, students can bring a paper they are working on for one-on-one advice and guidance from the course instructor.

Instructor: Jean-Luc Lebrun
Contact: jllebrun@me.com
Organization: 2 full days in November

**Popular Science Communication**

This workshop will give you an overview of scientific communication and the variety of audiences that you may interact with: journalists, general public, patients, fund raisers etc. Workshop goals include building researchers’ communication skill and confidence in engaging with public audiences and providing best practices for use of different communication methods and mechanisms.

Participants can expect to come away from this workshop with: the skills to adapt their communication to a variety of audiences; the ability to use narrative, analogies, and other effective communication techniques to engage and hold an audience’s attention; the different way to communicate and how to use social media: blogs, Twitter, Facebook, etc.

Through discussion, self-reflection, small group work, mock interviews, and practice sessions, workshops focus on the importance of effective communication that clearly conveys research concepts. We encourage workshop participants to think about how content applies to their own work and future communication opportunities.

Instructor: Celine Giustranti
Contact: celine.giustranti@curie.fr
Organization: 2 full days in March
Requirement 7: Well-being, integrity, and responsibility in research

Requirement objective: Scientific research often involves complex issues of maintaining integrity, managing conflict, balancing work and personal life, dealing with stress, etc. These courses aim to address some of these common issues in a comfortable, collaborative, and open setting. To meet this requirement, students must take one of the four following courses:

- Managing scientific collaborations: Integrity, negotiation and conflict
- Best DOC: Well-being, health, and work for the doctorate
- Responsibility in research and entrepreneurship

Managing scientific collaborations: Integrity, negotiation and conflict

Students will learn to manage scientific collaborations, and will specifically learn techniques for negotiations, conflict management, and maintaining their integrity in the context of research collaborations.

The US Office of Research Integrity wrote about scientific collaborations: “we are struck by how many disputes could have been avoided if only the collaborators had taken a few precautionary steps at the outset”. This course, which includes numerous practical applications, will ensure that students acquire the right reflexes to manage their scientific collaborations.

At the end of the course, students will have gained the following skills:

- Gauge the compatibility of prospective collaborators
- Knowing their personal rights and duties in relation to the collaboration process
- Communicating assertively
- Receiving and giving criticism
- Negotiating with collaborators
- Managing and solving conflicts
- Balancing good research conduct with personal morals

The course will start with a discussion of how and why collaborations fail and will continue to construct best practice to create successful exchange. Through case studies and specific instances brought by course participants students will explore issues related to collaborations, negotiation, and conflict management. Specifically, the course will cover:

- Introduction to scientific collaboration: why, how, with whom? The key principles for ensuring harmonious collaboration
- Identifying and approaching potential collaborators
- Creating a collaboration agreement
• Managing collaborations
• Assertiveness and negotiation – principles and practice
• Conflict management including practical applications
• Discussion and analysis of issues encountered by trainees

Instructor: David Karlin
Contact: davidgkarlin@gmail.com
Organization: 2 days in March

**Best DOC: Well-being, health, and work for the doctorate**

Objective: The Best DOC workshops offer students a space to discuss the challenging and stressful aspects of the PhD and to provide support to their peers who are also facing similar issues. Students will gain more control over their negative emotions and improve their resilience in the PhD program.

Doing a PhD is a stimulating, but also a challenging and stressful experience, as pointed out in the growing body of literature on doctoral education. Many stress factors affect PhD students: elaboration of a research project, integration in a research lab and into various networks, relationships with the supervisor(s) and with peers, growing competition, quest for funding, the doctoral writing, solitude, lack of self-confidence, precariousness, uncertain future, etc.

It is perfectly normal to face obstacles during the “doctoral journey” and there seems to be an increasing awareness among academics of the need for a specific support during this long adventure. Various institutional initiatives flourish around the world and intervention programs at schools and universities have shown their efficiency. The SPARK Resilience program, which aims to help people gain more control over their negative emotions and improve their resilience skills, has been adapted to address the specific needs of doctoral students in this series of workshops.

During the small group discussion sessions students will collaborate to improve engagement at work, self-motivation, personal growth and well-being; as well as develop techniques to reduce anxiety, unpleasant/negative emotions and depression.

Instructor: Pascale Haag
Contact: pascale.haag@gmail.com
Organization: Tentatively one 2-hour meeting a per week for 4 weeks in May
Responsibility in research and entrepreneurship

Objective: This course is intended for those students who are interested in responsibility in research, innovation and entrepreneurial activities. Students will gain tools necessary for ethical practices in entrepreneurial work and a vision of the work field of Responsible Innovation.

This course will feature a number of short modules with external participants to discuss ethical behavior in research and entrepreneurship. The modules will cover the following:

• Social entrepreneurship and link between research and entrepreneurship
• Deepening the concept of Frugal Innovation and Bottom of the Pyramid markets
• Intellectual Property issues and innovative IP management for collaborative work
• Useful tools: evaluation grid, opportunity matrix, ...
• Apply these concepts to actual research and innovation projects - including the research work of the students

Instructor: Melanie Marcel
Contact: melanie.marcel@soscience.org
Organization: 2 full days in March
7. “À la carte” Courses

FdV offers a number of technical, teaching, and transversal skills courses.

7.1 Technical and teaching courses

Life Science of Naruto?!

Objective: Apart from having the pleasure to (re)discover Naruto, or to discover at least what everybody around you know and you don’t(!), the aim of this module is to use this Manga series to discuss:

- The deep significance that we can find in the story and behaviors shown. This part is mostly about cognitive/neurosciences and psychology. It shows how we can describe the functioning of our brain, from very clear and detailed examples.
- The analogies that can be drawn from some aspect of Naruto’s world, or how they can be related to “common” biological theories. The idea is to reveal them and then to discuss and challenge them.

Each session will begin with a viewing of an episode or parts of episodes of Naruto and will continue with a discussion around the theme of the day. The discussion can then go on about the meaning of analogies, their significance and importance, usefulness. Some possible themes include:

- Naruto and cognitive sciences: perception and interpretation (with illusions and their mastering), communication and language (and what is actually communicated) and an original (involuntary?) representation of the unconscious brain.
- Naruto and psychology: individual freedom, predetermination, social interactions, resilience...
- Naruto and Biology: notion of life (vital fluid? what is alive? dead?) the individual, the notion of species, trans-species and bifurcating ones and an (involuntary) and original representation of DNA encoding

Instructor: Stephane Douady
Contact: stephane.douady@univ-paris-diderot.fr
Organization: Tuesday evenings in October and November
One Week Immersion into Python Programming for Scientist

Objective: The aim of the course is to provide an intensive introduction to Computer Programming using the Python programming language.

This course will cover basics to advanced programming skills that you’ll learn almost exclusively solving problems and exercises of a daily-based progressive difficulty. While this course is both adequate for people without any prior experience in programming, and to those having already programmed but who are willing to get better.

During the weekday sessions students will be presented with numerous exercises with a level of difficulty spanning from very easy to very hard. The idea is that anyone can start doing the exercises and struggle at the point of difficulty that will make him/her improve his/her understanding and abilities to code. During the weekend sessions, students will team up to realize a project. They will be given a choice between several projects involving scientific computing, web, network, etc. This will be an opportunity to realize a full program and to discover libraries (i.e., existing code) adapted to their area of expertise.

Instructor: Antoine Angot
Contact: antoine@leaneous.com
Organization: One full week in January

Introduction to Machine Learning

As biology is becoming more and more quantitative, today’s scientists end up with a huge amount of numbers to describe their experiments / their empirical observations. Traditional approaches, based on p-values and hypothesis testing, are very often pushed beyond their capabilities in these cases. In this 3 days workshop, we will cover the basics of machine learning (ML), namely how to extract information from datasets that could not be analyzed with the naked eye or manually. The aim is to share both the underlying mathematics (in a gentle way!) as well as provide a practical use of the methods, through dedicated softwares. Students are more than welcome to come with their own datasets and/or share the ML methods they could have been already using. In that sense, the proposed schedule is only an outline and many of its parts could be covered by one or more willing participant. In the same spirit, if a specific method is of interest for a good number of people, it can be added in the program.

Instructor: Yann Le Cunff
Contact: yann.lecunff@gmail.com
Organization: 2 full days in May
Whole cell modeling

Objective: In this course students will learn about and implement a physiological model of a cell then propose their own improvements and additions inspired by their research interests.

Description:
A large amount of work has been devoted to the mathematical and computational modeling of specific cellular processes. As accurate as these models may be, their isolation from the physiological cellular context hampers the study of the role they can play in global cellular behaviors. A whole cell model is an aggregate of mathematical representations of cellular subprocesses (e.g. translation, protein maturation, etc.) [see an example of a whole cell model]. Of course, such sub models need to be validated against experimental data. Eventually, we expect the aggregate model to explain high level behaviors of a cell like the growth rate. During this hands-on workshop, such a model will be realized.

Format:
Participants will be divided into several groups. In part 1 of the course, the groups will implement a base model of a cell then they will propose extensions to the model based on their research interests and expertise. This will be the occasion to ask questions, draw and test hypotheses about very exciting emergent phenomena at both the cellular and population scales, in a research-like fashion. In part 2 of the course, one week later, students will complete their implementations and present their extensions to each other.

The models will be written and simulated in MATLAB.

Instructor: Vincent Danos and Guillaume Terradot
Contact: vincent.danos@gmail.com and guillaume.terradot@symbiose6.fr
Organization: 3 full days in January

Introduction to optical imaging and image analysis

Optical microscopy is one of the most useful tools in life science studies. This course aims to introduce the different optical microscopy modalities. The course begins with basics in optics and image formation, then steps through the different contrast mechanism before detailing the latest advances super-resolution microscopy. The goal is to familiarize students with the different approaches in order to correctly identify the best technique to investigate their biological question. A second part of the course is dedicated to image handling and analysis using the widespread imageJ software. It includes a hands-on session with real data examples. The course will cover the following
**Light microscopy**

Basics in optics: lens and image formation
- How does a microscope work?
- Noise: origins and characteristics
- Contrast modalities in microscopy: transmission, phase contrast, fluorescence, other contrast mechanisms
- Imaging in 3D problems and solutions: confocal imaging, light sheet excitation, multiplane imaging
- Super-resolution methods: insights into single molecule localization techniques: fluorophores, excitation power, localization.
- Localizing molecules in 3D: challenges and the different available solutions
- How to choose the best technique to treat your biological question: pros and cons of each

**Basics in image processing**

- Detection: detectors, camera, pixels
- Image handling
- Image handling: histogram, contrast, brightness
- Background substraction, denoising, filtering, deblurring
- Deconvolution, correlation
- Single molecule localization: thresholding, localization, precisions and accuracy, tracking

**Hands-on session using ImageJ**

- Interface
- Image handling and visualization
- Measurements, profiles, projections
- Deconvolution
- Building macros
- Single molecule localization

Instructor: Bassam Hajj  
Contact: bassam.hajj@curie.fr  
Organization: 3 full days in February

**Games to teach and do research**

Objective: The aim of this course is to first assess the potential and the limitations of using games to do research and teach, and secondly for participants to “gamify” their PhD projects.

Recently, a great number of scientific projects were developed around massive
online games (Foldit, Galaxy zoo, Picbreeder, Phylo). Also, it is well recognized that learning can be achieved through playing games. In this course, we will review some example related to:

1) the use of games to perform a given research subject,
2) scientific research which can be done with games,
3) games to teach a oriented concept, and
4) knowledge one can get from games.

The objective is to assess the potential and the limitations of using games to teach and do research. In particular, we will discuss “normal” games to emphasize the key rules of a successful game play. Eventually we will see how to “gamify” your PhD as a concrete and practical example of how to turn a scientific project into a game.

Instructors: Amodsen Chotia and Raphael Goujet
Contact: amodsen@cri-paris.org and raphael.goujet@cri-paris.org
Organization: 2 full days in May

**Introduction to mentoring bachelor students: Reproduce and enhance an experiment of your PhD project**

This course offers students the opportunity to experience project-based mentoring with students from the bachelor program Frontières du Vivant. It invites students to connect their research project with a short project developed by the undergraduate students. This course also offers you support to develop a relevant teaching attitude in this framework, and to explore how project based teaching approaches can be further embedded in more classical teaching approaches.

Bachelor students work in groups of 3-5 to (1) replicate an experiment proposed by a researcher, PhD student; then (2) design and perform and additional experiment, to enhance the previous one.

The role of the PhD student will be to

- Propose a simple experiment that can be replicated by PhD students in 20h, in the lab in Cochin, or outside the lab (cognitive studies, ecology...).
- Meet 3-5 times with the students to guide them for the replication of your experiment and for designing an additional experiment, as well as to discuss the results with them. In between these meetings, bachelor students are also regularly guided by teachers along the development of their project.
The PhD students will see a number of outcomes from this training:

- Gain experience in mentoring students in a small group setting
- Have one of your experiments reproduced
- Have a pilot experiment performed by students: the results of which can inform future development of similar experiments in your PhD project
- Connect your research to your teaching practice
- Develop a teaching philosophy that supports autonomous learning of students
- Share different dimensions of the research practice: research methodology, social dimensions, institutional aspects, etc.
- Analyze your own teaching practice, with respect to defined pedagogical objectives
- Explore how project-based teaching approach can nurture more classical teaching approaches

Requirements:

- No teaching experience is not required.
- Experiments can be performed (I) in your lab or (ii) in the lab of the CRI, if the facilities allow it (mostly equipped for microbiology and molecular biology), or (iii) as field experiments (e.g. cognitive experiments, ecology...).

Instructors: Livio Riboli-Sasco, Claire Ribrault from Atelier des Jours à Venir
Contact: claire@joursavenir.org and livio@joursavenir.org
Organization: February - April 2017

**Educational outreach through theatrical performances about scientific research (in French and English)**

This training consists of 3 days of interactive courses and 3 days of activities in a secondary school. In secondary schools, early career researchers (PhD students) will interact with a group of students and an artist who are conceiving together a theatrical performance about science.

Attendance to this workshop is for young scientists eager to enrich their academic role with a strong social commitment, or willing to explore unusual interactions between science and society.

Students will have the opportunity to reflect about the research practice, and responsible science communication, practice of responsible science communication, get first hand experience with educational challenges in and around Paris.

Requirements: The workshops will be in English and interaction with secondary school pupils will be in French, so it is necessary that PhD student participants...
speak both French and English

Instructors: Livio Riboli-Sasco, Claire Ribrault from Atelier des Jours à Venir
Contact: claire@joursavenir.org and livio@joursavenir.org

Organization:
• 3 day workshop: reflexivity for a responsible communication of science
• 2h session : meet the artists (meeting facilitated by the trainers)
• 5 x 0.5 day workshops in schools: meet with pupils and share your research experience, to contribute to developing theatrical performances about science
• 2 x 2h sessions of follow-up and mentoring

**Beyond Scientific Thinking**

Objective:
To become aware of the frameworks that shape scientific thinking, to ponder on the creative process and to develop a sensitive approach to research from a personal artistic work.

#Research-as-creation
#Art-science
#Creative process
#Emotions
#Reflexivity

After completing graduate studies in physics and biology, Aurélien Peilloux entered La Fémis in order to learn film-making. At the same time, he carried out at the CRI a PhD on the relationships between art and science, both in the works and in the creative process.

During her thesis in neurosciences at the IBENS, Charlotte Salvatico co-wrote and directed an hybrid short film intertwining the dissemination of scientific knowledge and the loss of the loved one, with the involvement of dance students of the Conservatoire national. She now runs the Parisian antenna of the Imagine Science Films association.

Description:
Aurélien and Charlotte will question the framework of thought that underlies the scientific approach, that is to say its founding paradigms, implicit rules, from the assumption of objectivity implying a separation between the subject and the object to the postulate of objectivity. A reflection on the creative process and on its vivid contradictions will allow students to become aware of the whole emotional, subjective and irrational part of any research process. Finally, a personal artistic work will be required so that the students will experience an approach both close
and far away from the scientific practice: based on their personal life or using elements to which they are sensitive, they will have to create an object that will express their questioning sensitively rather than rationally. Re-establishing the link between Being and Being-in-the-world, they will be led to think of ethics from an inner, sensitive and personal perspective.

Format:
the course will be divided into three sessions of two days which will include:

Theoretical approach (5 lines of research of 2 hours each):

- Framework of scientific thinking (founding paradigms, myth of the Newton trunk, systemic approach and global vision)
- Introduction to research-creation (founding principles and necessity, hybrid and evolutionary methodology, epistemology of the mystery)
- Tiers included and creation (dynamic contradictions, complex thinking)
- Creative processes and emotions (sensible approach of the world, idea-feeling, logic, intuition and advances in neurosciences)
- The creative process at the crossroads of knowledge (scientific approach and shocks of thought, metastability)
- Personal enquiry report (over the duration of the semester, with several sessions of personal monitoring): conception of an artistic object in a chosen form (film, photo, story, etc.) structured around a central motif in the life of the student and his research.

Module “off the beaten path” (3/4 sessions of 3 hours): invitations of researchers / artists to present their “off the beaten path” and art-science field trips.

Instructor: Aurelien Peilloux and Charlotte Salvatico
Contact: aurelien.peilloux@cri-paris.org and csalvatico@imaginesciencefilms.org
Organization: see FdV calendar

**Sense about science: the role of evidence and science in society**

Climate research, biotechnology, nanomaterials, vaccination... More and more research fields are suffering from a bad reputation with large parts of the public. This can even result in regulations which make further research and innovation difficult.

How can you make your voice heard in polarised debates? How can you prevent further polarisation? How can you make sure that your research benefits society
and that the public understands the benefits?

We will start this course with an ice-breaker exercise, sharing some of our own experiences with the public perception of our research.

From these experiences, we will learn how you can improve your interaction with citizens, how you can open up to society and how you can defend evidence in controversial topics.

In the second part, we will focus on the role of research and evidence in policy. Where lies the balance between evidence and values? What is your role as a researcher in evidence-based policy? How do you interact with politicians and how do you inform policy? With some concrete examples, we will learn how you as a young researcher can make a difference in society.

Outline of the course:

• Introduction: what is Sense about Science EU, what is my perspective?
• Why should you care, as an early career researcher, about the use of evidence and science in society? Why should you care about EU policy?
  • Impact of misinformation (vaccination, detox,...)
  • Importance of well informed societal debates (e.g. climate change)
  • Impact of policy and polarised debates on research (e.g. biotechnology)
  • Citizens care about evidence! -> responsibility of researchers towards society
• What is the role of evidence in public debates?
  • Good and bad examples of public debates and public engagement
  • How can young researchers make a difference?
• What is the role of evidence in EU policy?
  • Outline of the policy process, balance between evidence and political debate
  • Current mechanisms of science advice
  • How can young researchers make a difference?

Instructor: Sense about science EU team
Contact: hello@senseaboutscience.org
Organization: see FdV calendar
7.2 Transversal courses

Figures for Presentations and Publications

During this hands-on workshop students will create and/or improve figures to communicate their scientific research for different settings. Students will explore the art of conveying a message through the discussion of figure(s) from the literature and figures for a document they are currently working on, e.g. TAC report or journal paper, such that they have a tangible output from the workshop. Students are encouraged to bring their own figures and data to make modifications during the course. Note that this is not a technical course in software for creating figures.

Roughly, the course will be outlined as follows:
• Introduction: Role of figures in presentations and publications
• Optimizing different types of figures
• Differences between figures for publications and presentations
• Figure finishing

Instructor: Diana Zala
Contact: diana.zala@espci.fr
Organization: One full day in May

Extended scientific literacy

Scientific research practice involves various literacy skills that constitute an essential part of the research process. Mastering a diversity of expression tools (e.g. blogs, creative data visualization, graphical abstracts) supports a responsible practice of research, and in particular it allows transparent dialogue within research communities and society.

This training moves beyond standardized formats of scientific articles and conference presentations, and leads participants to develop lesser-known literacy tools specific for their research project. During both individual and group work, students will first develop graphical abstracts representing their work. Next students may choose from 3 options
1) work further on a research poster which that includes the graphical abstract
2) gamification of an existing poster presentation/work on how to engage colleagues into a discussion about their poster at a conference
3) participate in a radio interview where students talk about their research for a general audience

Students are expected to be present and actively participate during the entire
course. Assessment will be based on the production of a new form of expression and on the contribution to other participants’ work.

Logistics:
• Participants leave Paris on Sunday night and return on Wednesday evening
• All transportation, food, and accommodation arrangements are included at no cost to FdV students

Instructors: Livio Riboli-Sasco, Claire Ribrault from Atelier des Jours à Venir
Contact: claire@joursavenir.org and livio@joursavenir.org
Organization: 3 full days in June

Transforming and leveraging your scientific skills for an efficient job search

Students will learn how to identify their key skills and transform them into an offer of services.

Researchers have numerous technical skills, but also other “transferable” skills of which many people, including the researcher him/herself, are probably not aware. Such skills may include working in a multicultural environment, dealing with failure, communicating efficiently, etc. Presenting these skills as an offer of services will improve job search prospects, as employers are not necessarily looking for precise transferable skills, but for what services researchers can offer them. At the end of the training session, students will learn to identify their key skills and to presenting them concisely as an offer of services.

The three day workshop will cover:
• Overview of your skills
• Identifying your unique selling points
• A systematic method to back-up your skills: the sales pitch
• Transforming your skills into an offer of service
• Showcasing your skills in a job application
• Showcasing your skills in a social network
• Designing and using your “elevator pitch”

This course will require students to work outside of the designated meeting times. Students should only register for this course if they are prepared to do that work.

Instructor: David Karlin
Contact: davidgkarlin@gmail.com
Organization: 2 full days in March, 8 week break from meetings for student to work independently, 1 full day in May
Online language lessons: Frantastique and Gymglish

Each morning you will receive an e-mail with an assortment of written content and audio recordings. Each lesson takes 10-15 minutes to complete and includes a story with dialogue, questions, ‘mini-lessons’ and revisions.

After clicking the ‘send’ button, you’ll receive your e-mail corrections with your score of the day, explanations on why you got each question right or wrong, transcripts of the audio recordings, the vocabulary you wanted to learn more about, etc.

The next lessons will be customized according to your previous answers, your expectations and your needs.

Coordinator: Elodie Kaslikowski
Contact: fdvphd@cri-paris.org
Organization: self-paced study

Group language lessons: French and English

Group language courses are offered to PhD and Masters students at the CRI who want to learn/improve their French or English. The focus will be on general communication, not specifically on science communication.

Students who register will have unlimited access to the InLingua online learning system plus weekly or biweekly small group lessons. An assessment test will be given to determine the students’ level and place him/her in a group.

The French lessons will be given for one hour once a week for 6 months. The English lessons will be given for one hour every other week for 6 months. All of the lessons will take place at the CRI. The lessons will likely be in the evening on a weekday, but the exact dates will be determined once all interested students have completed the assessment test.

Coordinator: AIV team
Contact: masteraiv@cri-paris.org
Organization: 1 hour sessions every week for French lessons, 1 hour sessions every 2 weeks for English lessons

Time management, priorities and personal organization

This training is dedicated to the improvement of time management and personal organization of PhD Student.
The training will take place in 2 sessions: the first one is dedicated to the presentation of tools and methods, and the second one to feedbacks on how the participants were able to use the training.

Our brain receives 5 times more information than it can handle daily, leading to a strong need to select high value tasks and to be able to implement them in an efficient manner. Such tools are now compulsory to strive in the current, very competitive research environment. Even if research results are not predicable, actions that lead to such results are. Learning to plan and organize research reduces uncertainty and therefore PhD student stress.

The aim of this training is to provide methods and tips on time management, priority management and personal organization in the context of research projects, and addresses several issues related to PhD students work.

The training is built on 3 aspects:

1. First, students will learn how to identify high value tasks associated to their personal project and objectives, and how to organize their working day taking into account these high value tasks.
   - What are the strategic tasks of my project?
   - How to organize my day?
   - How to measure my progress?

2. Then, student will learn how to improve their work intensity using several methods linked with their brain natural behavior. This part is strongly related with the reduction of stress and tiredness.
   - How to reduce stress and tiredness?
   - How to harness the full potential of modern communication tools?
   - Why and how to build my 3rd pillar?

3. Finally, the last part deals with the laws of productivity, and explains how to use its psychology to reduce dead times during the day. Procrastination reduction and habits creation methods are proposed to promote the future use of the elements provided during the training.
   - Laws of productivity: how to take advantage of your own behaviors?
   - How to defeat procrastination?
   - How to create habits?
The value of science

This workshop proposal sets off to provide the time and the inspirational atmosphere to reflect on the broad value of science in today’s society.

In an era of short-term goals driven by economic needs and governed by competitive parameters, the wider impact of science in society has been overlooked. By exploring the fundamental characteristics of research and science as curiosity driven intellectual pursuits we will develop a strong argument, from multiple disciplinary angles, to support the pursuit of knowledge as an end onto itself and not exclusively as a means to an end. We will explore the difficult issue of measuring how fruitful science is to society, for example in education, creativity, freedom, democracy, safety/defense, pride, together with more conventional, concrete and immediate criteria (e.g. patents, technology transfer, etc). We will also explore how the value of science requires transgression, a combination of objective (evidence, data, etc) and subjective (meaning, attitude, etc) considerations.

The workshop aims (4 sessions x 4h per week) to study how science impacts society at multiple levels including economic, political, social and cultural. The workshop will be targeted to PhD students in exact, natural or social sciences. It will include selected weekly readings [see references as examples], group discussions, invited speakers and elaboration of a product draft (written document or audiovisual piece). We will work in at least four areas:

- joy;
- transgression;
- practical applications;
- power

This product will be used and distributed in subsequent courses, lectures, outreach activities, online platforms. If possible, it will be converted into a publication-type article for a wide interest science journal.

References:

- Cosmos, Alexander von Humboldt, 1845-1862.
À la carte courses

- Science the Endless Frontier: A report to the President on a Program for Post-war Scientific Research, Vannevar Bush, 1945.
- The Value of Science: Essential Writings, Henri Poincare, Modern Library Science, 1903-1908.
- The Usefulness of Useless Knowledge, Abraham Flexner, Harpers Issue 179, 1939.
- The value of basic research. http://www.sciencephilanthropyalliance.org
- The Value of Scientific Research, C.S. Beals, 1931.
- The Impurity of Science, Melvin Calvin, 1962.

Instructor: Andres Couve
Contact: andres@neuro.med.uchile.cl
Organization: 4 sessions in November – December

7.3 DIY your PhD curriculum

All FdV students are welcome to take a “Do It Yourself” (DIY) approach to their PhD curriculum. This is especially true for the New Frontiers students as their interests and needs are broad and may not be fully addressed by the current FdV curriculum. We want students to be an active part of their PhD training, so we encourage you to DIY your PhD curriculum.

The following are a list of options for New Frontiers students to participate in while developing their custom curriculum. The FdV staff is available to advise students through the process and to provide any support that may be needed.

EdTech courses at the CRI

New Frontiers students are welcome to participate in any of the EdTech courses, provided they get approval to join from the EdTech Director of Studies. Please contact Lea Douhard at lea.douhard@cri-paris.org for admission into the EdTech courses.
Boot camps

The intent with these boot camps is to provide you with the framework (method, toolbox, strategy, a vision of the ecosystem and some network) you need to achieve your own research or entrepreneurial projects. Moreover, since participants come from different backgrounds we try to give you common practical knowledge to feed your experimentations. While some of the subjects might be familiar to you, others will probably be new and challenging. Luckily, you are part of an interdisciplinary crowd, so there should always be someone nearby who can help you out. This is one of the most important lessons at the CRI: work together.

The boot camps available to New Frontiers students are:

- 5-9 Sept: Education controversies mapping (Sophie Pène)
- 12-16 Sept: Learning by doing (Kevin Lhoste)
- 19-23 Sept: Game design (The Gamelab http://cri-paris.org/gamelab/)
- 26-30 Sept: Pedagogy design (SAPIENS, Matthieu Cisel, Sophie Pène)
- 3-7 Oct: Research design (teachers team)

Courses

The following courses may be of interest to New Frontiers students. Please see the AIRE handbook for details and the EdTech calendar for course dates.

- Game design for learning
- Learning by doing (K. Lhoste, J. Chevrier)
- Cognitive science (F. Cazalis)
- Philosophie de l’apprendre pour le XXIe siècle (S. Audidière, A. Janvier)
- Technologies for learning (J-F. Bonnet, K. Lhoste)
- Innovative pedagogy and learning society (S. Pène)
- Open science & Citizen science (S. Mesmoudi)
- A Project-based Overview of the Digital Humanities (A. Berra)

Create a “White Course”

Students are welcome to work together to create a course/workshop on a topic of their choosing, for example: open science, innovative education, science and design, etc. In order to create a course, students would need to contact and arrange for speakers and presenters. They are encouraged to work with the FdV staff to make contacts with members of the CRI network. A budget is available to facilitate such a course, please contact the FdV staff for details.

Create a MOOC

In keeping with the DIY approach, students are welcome to work with the MOOC factory at the CRI to create an online course on a topic of their choosing. A
number of programs and resources are available for interested students. Please contact the FdV staff for details.

**Take a MOOC**

Students are welcome and encouraged to participate in MOOCs on subject matter that is relevant to their doctoral training. Coursera is a good resource to find upcoming MOOCs. Many MOOCs are offered for free and only the certificate at the end of the training requires payment. FdV does not require this certificate to validate the MOOC hours. Rather, students may take a screen shot of the completion page and submit that image as the validation document with their training report.

**Other workshops**

A number of workshops are held by members of the CRI or its partners. Many of these may be suitable for PhD training for New Frontiers students, including:

- Sage bionetworks
- Night Science
- Hello Tomorrow Challenge
- iGamer workshops
- World Innovation Summit for Education (WISE) events
- Frontiers in Education (FIE) international conference

**Student initiatives**

Student led initiatives are a welcome and encouraged part of the FdV curriculum. Involvement in activities like CRI academic clubs and the FdV PhD retreat can be validated as training hours.

**Student clubs**

Students have the opportunity to form clubs based on mutual interests during the CRI Discovery Days. They will have access to a budget for club events. Please contact the FdV staff for more information on how to form new clubs. Previous FdV student clubs include:

- Brain Control Club
- WAX Science
- Gamelier
- In Vitro Artificial Intelligence
- Retrospective and Visionary Talks
- Fabelier
- Synthetic Biology
- Open Science School
FdV PhD Retreat

In June of 2017, the third annual FdV PhD retreat took place in the South of France. The retreat is an opportunity for FdV students, staff, and alumni to come together to reinvigorate the community. Typically, the retreat features scientific talks in the morning, social activities in the afternoons, and informal meet-ups between all of the participants in the evenings. The hours spent at the retreat related to scientific exchange will be validated as training hours.

Future editions of the FdV PhD Retreat are welcome and encouraged. Please contact the FdV staff and FdV student representatives if you would like to be involved in planning the next retreat!
## 8. Important Contacts

### 8.1 FdV PhD Program contact

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>FdV PhD Office</td>
<td><a href="mailto:fdvphd@cri-paris.org">fdvphd@cri-paris.org</a></td>
<td>01 76 53 11 22</td>
</tr>
<tr>
<td>François Taddei, FdV PhD Director</td>
<td><a href="mailto:francois.taddei@cri-paris.org">francois.taddei@cri-paris.org</a></td>
<td>01 76 53 46 01</td>
</tr>
<tr>
<td>David Tareste, FdV PhD Co-director of Studies for Life Science FdV</td>
<td><a href="mailto:david.tareste@cri-paris.org">david.tareste@cri-paris.org</a></td>
<td>01 57 27 80 38</td>
</tr>
<tr>
<td>Antoine Tesniere, FdV PhD Co-director of Studies for New Frontiers</td>
<td><a href="mailto:antoine.tesniere@cri-paris.org">antoine.tesniere@cri-paris.org</a></td>
<td>01 58 41 14 89</td>
</tr>
<tr>
<td>Maria Molina Calavita, FdV PhD Scientific Coordinator</td>
<td><a href="mailto:maria.molinacalavita@cri-paris.org">maria.molinacalavita@cri-paris.org</a></td>
<td>01 76 53 11 26</td>
</tr>
<tr>
<td>Elodie Kaslikowski, FdV PhD Administrative Assistant</td>
<td><a href="mailto:fdvphd@cri-paris.org">fdvphd@cri-paris.org</a></td>
<td>01 76 53 11 22</td>
</tr>
<tr>
<td>FdV Student Representatives</td>
<td><a href="mailto:students.representatives.ed474@gmail.com">students.representatives.ed474@gmail.com</a></td>
<td></td>
</tr>
</tbody>
</table>

### 8.2 FdV Support and CRI contacts

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tien Clabaut, Accountant</td>
<td><a href="mailto:tien.clabaut@cri-paris.org">tien.clabaut@cri-paris.org</a></td>
<td>01 76 53 11 10</td>
</tr>
</tbody>
</table>

--> Contact Tien to submit invoices and receipts for FdV reimbursement

<p>| Jean François Gianni, General Services Manager | <a href="mailto:jean-francois.gianni@cri-paris.org">jean-francois.gianni@cri-paris.org</a> | 01 76 53 11 17 |</p>
<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youcef Benarezki</td>
<td><a href="mailto:youcef.benarezki@cri-paris.org">youcef.benarezki@cri-paris.org</a></td>
<td>01 76 53 11 19</td>
</tr>
<tr>
<td>General Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nathalie Sussfeld</td>
<td><a href="mailto:nathalie@cri-paris.org">nathalie@cri-paris.org</a></td>
<td>01 76 53 11 08</td>
</tr>
<tr>
<td>Human Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT support team</td>
<td><a href="mailto:it-team@cri-paris.org">it-team@cri-paris.org</a></td>
<td>01 76 53 11 18</td>
</tr>
</tbody>
</table>

### 8.3 Other CRI programs

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIV Masters Program</td>
<td><a href="mailto:masteraiv@cri-paris.org">masteraiv@cri-paris.org</a></td>
<td>01 76 53 11 25</td>
</tr>
<tr>
<td>EdTech Masters Program</td>
<td><a href="mailto:masteredtech@cri-paris.org">masteredtech@cri-paris.org</a></td>
<td>01 76 53 11 29</td>
</tr>
<tr>
<td>Licence FdV Bachelor Program</td>
<td><a href="mailto:licencefdv@cri-paris.org">licencefdv@cri-paris.org</a></td>
<td>01 76 53 11 24</td>
</tr>
<tr>
<td>Les Savanturiers</td>
<td><a href="mailto:savanturiers@cri-paris.org">savanturiers@cri-paris.org</a></td>
<td>01 76 53 11 35</td>
</tr>
</tbody>
</table>

### 8.4 Paris Descartes University Contacts

**Directeur de l’Institut de Formation Doctorale**
Michel VIDAUD

**Responsable administrative de l’Institut de Formation Doctorale**
Anne-Claire FULON
anne-claire.fulon@parisdescartes.fr / ifd@parisdescartes.fr

**BUREAU D’ACCUEIL ET DE SUIVI DES DOCTORANTS (INSCRIPTIONS)**
scolarite.doctorat@parisdescartes.fr
01 76 53 01 12/ 01 13

**BUREAU DE L’ORGANISATION DES SOUTENANCES**
soutenances.phd@parisdescartes.fr

Gislaine MONTEBELLO
gislaine.montebello@parisdescartes.fr
01 76 53 01 14
8.5  Paris Diderot University Contacts

Directeur adjoint
Fernando RODRIGUES LIMA
fernando.rodrigues-lima@univ-paris-diderot.fr
01 57 27 83 32

Responsable administrative adjointe chargée des cotutelles et délivrance des diplômes
Priscilla GUSTAVE-PERRON
priscilla.gustave-perron@univ-paris-diderot.fr
01 57 27 65 94

Secrétariat de l’IED et chargée des aides à la mobilité des doctorants
Sylvie LECOMTE
sylvie.lecomte@univ-paris-diderot.fr
01 57 27 54 11

Chargée des HDR et chaîne d’inscription
Nathalie SOROMAN
nathalie.soroman@univ-paris-diderot.fr
01 57 27 65 99
Gestionnaire des conventions de financements des doctorants
Véronique BOTTIUS
veronique.bottius@univ-paris-diderot.fr
01 57 27 55 00

Gestionnaire ED
Jocelyne CABALD
jocelyne.cabald@univ-paris-diderot.fr
01 57 27 54 26

Chaîne d’inscription
David GONCALVES
david.goncalves@univ-paris-diderot.fr
01 57 27 65 91