

# Career Development Plan-Year 1

## *(Draft)*

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Date: 27/11/2015

### **BRIEF OVERVIEW OF RESEARCH PROJECT AND MAJOR ACCOMPLISHMENTS EXPECTED (half page should be sufficient):**

In the Early Modern Age (16th-17th centuries), the construction of ocean-going ships was paramount to the development of cultural encounters in what became the Age of Discovery and European expansion. Spain was one of the biggest forces of that time.

The European project “ForSEAdiscovery” seeks answers in this context to the following key questions: Could Iberian forest resources sustain the increasing demand of sound timber, or were the wood imported from elsewhere? If so, how were the trade networks organized? This project will address these questions through a multidisciplinary and innovative training research program to improve the understanding of our historical past, our cultural heritage, and our knowledge of the use of resources for shipbuilding.

The objective of this PhD thesis (ESR 12), taking part of the project, is to identify the provenance of the Iberian shipbuilding wood. For this, geochemical tracers (Sr isotopes, major and trace elements) are used and measured in shipwreck woods and actual Spanish forests (living trees, local soils, geological materials, rainwater). The hypothesis is that trees growing on contrasted rocks and soils have specific geochemical signatures, which can be an indicator of geographic provenance.

The intended results at the end of this PhD are the creation of a geochemical and isotopic database of soils and living trees (oak and pine) from key areas where timber was supplied for shipbuilding, and the assessment of shipwreck woods geochemical and isotopic signatures to trace their provenance.

## **LONG-TERM CAREER OBJECTIVES (over 5 years):**

### 1. Goals:

- Get an academic position as a Researcher or Associate professor in a university.
- Participate in the creation of a team regrouping geologists and environmental researchers at the Lebanese University.

### 2. What further research activity or other training is needed to attain these goals?

- Find a post-doctoral position after the PhD.
- Get an experience in teaching.
- Participate in management training
  - \* To learn to work in a team and to communicate and discuss with other colleagues.
  - \* To supervise a group of scientific researchers.

## **SHORT-TERM OBJECTIVES (1-2 years):**

### 1. Research results

- o Anticipated publications:

- Publication 1: Review article on previous studies:

- \* That used different approaches for provenance of archaeological timber.

- \* That worked on different archeological materials provenance using various geochemical tracers in order to precise the tracers (for example specific trace elements) adapted to our study context.

- \* Which measured Sr isotopes in rocks, soils and trees in order to make an initial database of isotopic signatures on different rock and soil types.

- \* Which investigated geochemical evolution of wood under water with time (exchanges either loss of elements or enrichment by contamination).

*(Journal of Archeological Science)*

- Project of publication 2:

“Could geochemical analysis of living trees in actual Spanish forests indicate a specific geographic area?” *(European Journal of Soil Science or Geochemica Cosmochemica Acta)*

- Project of publication 3:

“Elimination of sea water signature in archaeological wood from shipwrecks: Methodology and limitations” *(Geochemica Cosmochemica Acta)*

- Project of publication 4:

“Assessment of shipwreck woods geochemical and isotopic signatures to trace their provenance” (*Journal of Archeological Science or Geochemica Cosmochemica Acta*)

- Anticipated conference, workshop attendance, courses, and /or seminar presentations:

- Participation to the three workshops of the ForSEADiscovery project

\* Workshop W1 (January 2015):

History of wooden shipbuilding  
Books and treatises on shipbuilding  
Communication and Presentation Skills

\* Workshop W2 (December 2015):

Dendrochronology and wood anatomy  
Scientific communication and multidisciplinary team-work

\* Workshop W3 (November 2016):

Dendroarchaeology of ships – practice and prospect  
Advanced team and project management

- Participation to a training course organized by the doctoral school of ‘Université de Lorraine’ on the development of the capacity in communication and management (November 2015)

- Participation to international meetings (oral communication if possible)

- \* BIOGEMON, summer 2016
- \* IKUWA 2016?
- \* EGU 2017?

- National meeting

- \* SFIS (French Society of Stable Isotopes), 2016

- Local presentations:

\* November 2014: Presentation on the PhD context, objectives and methods. LIEC laboratory (Nancy, France)

\* January 2015 - Presentation of the first PhD results during the meeting of the ForSEADiscovery project (Madrid, Spain)

\* June 2015 - Poster communication at the LIEC doctoral conference presenting the advances and the latest results in the PhD (Nancy, France)

\* December 2015 - Mid Term Report: Presentation of the advances and the latest results in the PhD (Madrid, Spain)

\* January 2016 - Poster or oral communication and article in French required by the University of Lorraine Doctoral School (RP2E, Nancy, France)

- Participation in short documentaries

2. Research Skills and techniques:

- Training in specific new areas, or technical expertise etc:

- Winter 2014-2015: Training to perform geochemical preparation of samples in a clean room and to be able to do isotopic analysis on a mass spectrometer and MC-ICP-MS

- May 2016 - Formation on Geographic Information Systems (GIS) and cartography techniques (Lampeter, Wales)

- Trainings of the project:

\* January 2015 - Courses on history of wooden shipbuilding.

\* December 2015 - Courses in dendrochronology and wood anatomy.

\* November 2016 - Courses in dendroarchaeology and wood provenance.

3. Research management:

- Fellowship or other funding applications planned (indicate name of award if known; include fellowships with entire funding periods, grants written/applied for/received, professional society presentation awards or travel awards, etc.)

- Application for a postdoctoral position.

4. Communication skills:

- Techniques of writing reports, scientific articles and short notes.

- Techniques of oral presentation to spread information, ideas and innovative concepts in academic meetings and general public conferences.

5. Other professional training (course work, teaching activity):

- To have an experience in teaching courses.

6. Anticipated networking opportunities

Create a long-term interdisciplinary network and working relationships to facilitate discussions, exchange of knowledge, advices, technical facilities and development of new scientific projects.

7. Other activities (community, etc) with professional relevance:

Management of own career progression.

Date & Signature of fellow:

27/11/2015

Fadi Hajj

Date & Signature of supervisor

27/11/2015

Anne Poszwa

## **Career Development Plan-Final year** *(Draft)*

**BRIEF OVERVIEW OF PROGRESS, ACHIEVEMENT AND PERFORMANCE (half page should be sufficient):**

**LONG-TERM CAREER OBJECTIVES (over 5 years):**

If relevant, mention any adjustments to your long-term career objectives as a result of the training received.

**SHORT-TERM OBJECTIVES ACHIEVED DURING THE TRAINING PERIOD:**

1. Research results
  - Publications (incl. in press):
  
  - Conference, workshop attendance, courses, and /or seminar presentations:
2. Research Skills and techniques acquired:
  - Training in specific new areas, or technical expertise etc:
3. Research management:
  - Fellowship or other funding applications achieved (indicate name of award if known; include fellowships with entire funding periods, grants written/applied for/received, professional society presentation awards or travel awards, etc.)
4. Communication skills:
5. Other professional training (course work, teaching activity):
6. Anticipated networking opportunities
7. Other activities (community, etc) with professional relevance:

Date & Signature of fellow:

Date & Signature of supervisor

## **Career Development Plan**

### **Guidance on some of the competencies expected**

The following points are a non-exhaustive series of aspects that could be covered by the career development plan, and it is relevant to the short-term objectives that will be set by the researcher and the reviewer at the beginning of the fellowship period. The objectives should be set with respect to the skills and experience that each researcher should acquire at a given time of his/her career. A postgraduate researcher at PhD level will have very different needs compared to a post-doctoral researcher at an advanced stage of his/her professional development. These objectives should be revised at the end of the fellowship and should be used as a pro-active monitoring of progress in the researcher's career.

#### **1. Research results.**

These should give an overview of the main direct results obtained as a consequence of the research carried out during the training period. It may include publications, conference, workshop attendance, courses, and /or seminar presentations, patents etc. This will vary according to the area of research and the type of results most common to each field. The information at this level should be relatively general since the career development plan does not strictly constitute a report on the scientific results achieved.

#### **2. Research Skills and techniques acquired.**

Competence in experimental design, quantitative and qualitative methods, relevant research methodologies, data capture, statistics, analytical skills.

Original, independent and critical thinking.

Critical analysis and evaluation of one's findings and those of others

Acquisition of new expertise in areas and techniques related to the researcher's field and adequate understanding their appropriate application

Foresight and technology transfer, grasp of ethics and appreciation of IPPR.

#### **3. Research management.**

Ability to successfully identify and secure possible sources of funding for personal and team research as appropriate.

Project management skills relating to proposals and tenders work programming, supervision, deadlines and delivery, negotiation with funders, financial planning, and resource management.

Skills appropriate to working with others and in teams and in teambuilding.

#### **4. Communication skills.**

Personal presentation skills, poster presentations, skills in report writing and preparing academic papers and books.

To be able to defend research outcomes at seminars, conferences, etc.

Contribute to promote public understanding of one's own field

**5. Other professional training (course work, teaching activity):**

Involvement in teaching, supervision or mentoring

**6. Anticipated networking opportunities.**

Develop/maintain co-operative networks and working relationships as appropriate with supervisor/peers/colleagues within the institution and the wider research community

**7. Other activities (community, etc) with professional relevance.**

Issues related with career management, including transferable skills, management of own career progression, ways to develop employability, awareness of what potential employers are looking for when considering CV applications etc.