

## Aerobiological Information Systems and allergicerespiratory disease management AIS LIFE (AIS LIFE LIFE13 ENV/IT/001107)

Annual meeting Vienna \_ Austria 19-20 of June 2015

### Action progress of CNR Institute of Clinical Physiology within AIS-LIFE project

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Università di Pisa

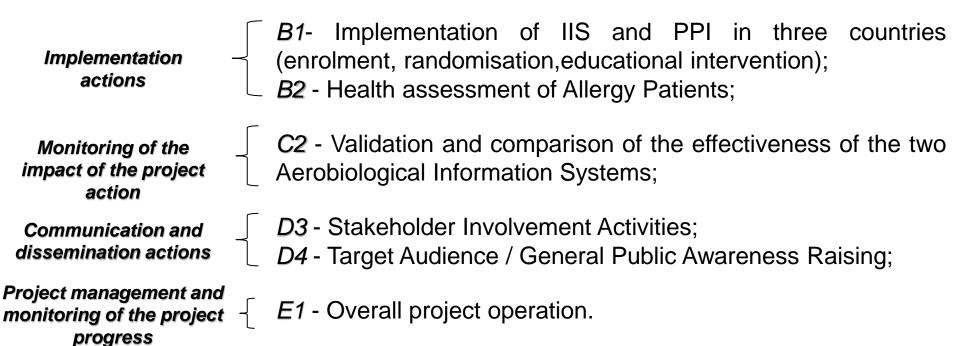
DIPARTIMENTO DI BIOLOGIA







IFC-CNR within AIS-LIFE project "Aerobiological Information Systems and allergic respiratory disease management" is involved in actions:



In particular, IFC-CNR is beneficiary responsible for implementation of **actions B1, B2 and C2**.





#### **Expected activities**

On the 12th month of activity, according to the protocol the following deliverables are expected considering Actions B1,B2 and C2 of which CNR is the Beneficiary responsible for implementation:

B1.1 - Detailed protocol of the field survey /educational material (Action: B1; deadline: 31/05/2015)

B2.1 - Daily diary, health and satisfaction questionnaires (Action: B2; deadline: 31/05/2015)

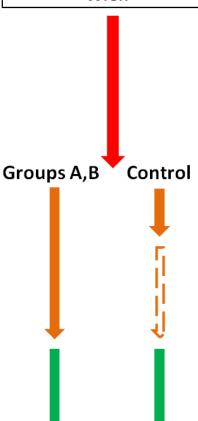
No deliverable associated to the action C2 is expected in the initial part of the project.





#### **Flow Chart**

Pisa, Lyon/Paris and Wien



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Sample selection and enrollment by Screening questionnaire

Randomization of the sample in 3 groups A) using IIS; B) using PPI; C) control group

#### TO - I observational phase (4 months)

Health questionnaire about health status and quality of life associated with allergic diseases in the previous 12 months

Educational intervention about promotion of lifestyles and medical recommendations to prevent respiratory allergic diseases exacerbations

Educational intervention about use and conditions of access to the Aerobiological Information Systems

#### Implementation phase (12 months)

Weekly access to the IIS and PPI (via internet or mobile devices)

#### T12 - Follow-up (4 months)

Health questionnaire about health status and quality of life associated with allergic diseases 12 months after the first interview

Satisfaction questionnaire on the ISS and PPI usage

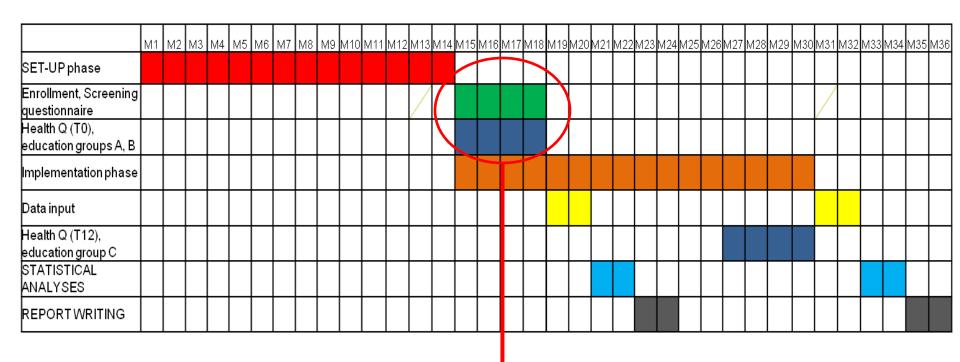
Educational intervention about use and conditions of access to the Aerobiological Information Systems on group C

#### Statistical analyses





#### **Study Timetable**



Enrollment, randomization, first observational phase and educational intervention **from August to November 2015** by each partner involved in the field survey.





#### Eligible subjects in Italy, Austria and France

Country	Source	Eligible	Enrolled at Screening Q considering a loss of 30%	Enrolled at T0 (-30% loss)/Total expected
Italy	pre-existent databases	<b>728</b> * ( <b>390</b> <65 yrs)	<b>510</b> ( <b>273</b> <65yrs)	357/250 (191/250)
	new enrollment	57**	40	28/250
France***	pulmonary clinics	177	124	87/250
Austria	???	???	???	???

<sup>\*\*\*</sup>Considering newly recruited patients





<sup>\*</sup>Considering subjects performing both PI2 and PI3

<sup>\*\*</sup> Considering students registered to the Earth Sciences Department of Pisa University (2014-2015) and a 19% prevalence of pollinosis (from PI2 study)

#### **Inclusion criteria**

- Subjects suffering from pollen allergy and reporting seasonal symptoms (last 12 months).
- Subjects ≥ 18 years of either sex.
- Subjects spending most of the week (at least 5 days/week) living, studying, working in the 3 study areas of Pisa, Paris/Lyon and Wien.

The requirements for eligibility will be checked through the assessment of inclusion criteria as reported in the Screening questionnaire. Each subject willing to participate in the study should provide in advance their signed consent form.





#### **Exclusion criteria**

- •Subjects not reporting seasonal symptoms (last 12 months).
- •Subjects ever treated with allergen-specific immunotherapy (allergen-SIT) with pollen extracts.
- •Subjects not spending the entire duration of the project (12 months) in the study area.
- Subjects not spending most of the week in the study area.
- •Selected subjects that, for any reason, manifestly should not be able to collaborate in the study.
- •Subjects < 18 years.





#### Research tools

The following diagnostic and monitoring tools will be utilized:

Screening questionnaire

- •Telephonic Health questionnaire
- Daily Diary
- Satisfaction questionnaire





#### **Steps from August to November 2015**

**Enrollment:** on the basis of preexistent archives (databases from previous studies, GPs or specialist patients databases etc.) and of new enrollment via web/media campaigns, eligible subjects will be contacted in order to provide them all the information about the study and to obtain the informed consent form.

**Randomization:** the selected subjects will be randomized into 3 groups: A) using the Integrated Information System (IIS); B) using the Personalized Pollen Information system (PPI); C) not exposed to any information system (controls).

**First observational phase (T0):** interview (by telephone, frontal interview on paper questionnaire or web questionnaire) to fill in the Health questionnaire about the health status and quality of life associated with allergic diseases in the previous 12 months (all the groups).

**Educational intervention:** educational intervention about use and conditions of access to one of the two AIS (groups A and B), promotion of lifestyles and medical recommendations to prevent exacerbations of respiratory allergic diseases (groups A, B and C).





#### **Completed activities**

- Field survey protocol (Italian and English versions), concerning the field study to assess efficacy of PPI and IIS systems, has been prepared as extended and shortened versions.
- Educational material is completed in Italian version.
- The Screening Questionnaire, the Health Questionnaire and the Satisfaction Questionnaire are completed in Italian and English versions according to pre-existing validated questionnaires and partner's revisions.
- A brief guide to the PPI and its mobile application is ready (Italian and English versions) and is circulating to partners for their revision.
- A dissemination letter for Italian stakeholders presenting the aims and the objectives of the AIS project has been prepared.
- A graphic / textual document has been prepared to be uploaded on the Pisa University website in order to launch and advocate AIS LIFE project at local level and, through a link to the official AIS LIFE web site, to enroll potential eligible users willing to participate in the field survey.





Furthermore, the realization of a centralized platform hosted by AIS web site to be utilized for enrollment, data collection, education, monitoring has been proposed to partners/coordinator. This system could be used by each partner involved in the field survey but also to coordinator for having a continuous update of the field survey.

A budget for the implementation and management of this online platform has been provided by Techno-science Unit, IFC, CNR to be compared and discussed in respect to other estimates.







#### Budget for the implementation and management of AIS online platform provided by Techno-science Unit, IFC, CNR

Necessità/possibilità:	Costo stimato	Note
Gestione Server per centralizzazione e raccolta dati SQ e/o centralizzazione e raccolta dati HQ e/o sito disseminazione e/o moodle: - implementazione server virtuale (max 50GB archiviazione, 2GB RAM) - installazione e configurazione software: WebServer, LimeSurvey (questionari) e DB (Mysql o PostgreSQL) o altro (in base alle necessità); - backup dei dati/server; - gestione del domino (eventuale); - certificato per connessione cifrata verso il server; - gestione mailing list e/o dominio posta elettronica (eventuale).	2500,00 €	2000,00 € primo anno, 500,00 € successivo
Sviluppo Q screening online con responsiveness (fruibilità anche su smartphone/tablet)	2000,00 €	
Programma gestione e restituzione score online / generazione codice alfanumerico / assegnazione al gruppo di studio		incluso nella voce precedente
Sviluppo Q health online con responsiveness (fruibilità anche su smartphone/tablet)	3000 €	
Sviluppo moodle educazionale, installazione, configurazione, preparazione del corso (NO gestione iscritti e contenuti corso)	2000,00 €	
Totale	9500,00 €	
Gestione sito (eventuale) disseminazione (comprende mantenimento server anche per 5 anni successivi alla chiusura del progetto, con backup del sito e meccanismi per inserire autonomamente tweet, news, foto)	10-12.000 €	
autonomamente tweet, news, foto)		





#### Pending actions/critical aspects

- As soon as possible the English version of educational material will be sent to the other partners in order to have their revisions.
- -As soon as possible the partner have to review the brief guide to the PPI and its mobile application (sent to all the partners on 24/05/2015 asking their suggestions/modifications).
- -Questionnaires and protocols have yet to be translated into French and German by partners.
- -The realization of a centralized platform hosted by AIS web site to be utilized for enrollment, data collection, education, monitoring have to be confirmed (or rejected).
- Enrollment, randomization, first observational phase and educational intervention from August to November 2015 by each partner involved in the field survey.





#### **Financial reporting**

Due to local administrative problems IFC-CNR has not yet uploaded on dropbox the following documents expected within June 5:

- ➤ financial reporting file updated to 30/04/2015;
- $\triangleright$  cost for action file updated to 30/04/2015;
- ➤ all the supporting documents related to the expenses made until 30/04/2015 according to Personnel and Travels.





# "Many thanks for the invitation and for the attention". Sandra Baldacci



