

LAUNCH Event Programme

Valletta, 30th January 2019

- 11:00-11:30 Registration, Welcome coffee/snacks
- 11:30 Welcome address by the Chief Medical Officer, Ministry for Health – **Dr Denis Vella Baldacchino**
- 11:40 Support of the Ministry of Education in the project – **Hon. Dr Evarist Bartolo**
- 11:50 Project Overview – **Prof Giuseppe Raso (Università di Palermo)**
- 12:00 Effects of Coeliac conditions in children and benefits of early diagnosis – **Prof Giuseppe Magazzù (Università di Messina)**
- 12:15 Support of the Pathology Department of MDH, current situation with coeliac diagnosis in Malta – **Dr Christopher Barbara (Mater Dei Hospital)**
- 12:30 Overview of the testing procedure to be followed in schools – **Dr Ramon Bondin (Mater Dei Hospital), Angele Giuliano (AcrossLimits)**
- 13:00 Q&A session between audience and panel (requesting feedback of educators)
- 13:30 Closing address by the Ministry for European Affairs and Equality – **Hon. Dr Aaron Farrugia**
- 13:40 - 14:30 Networking lunch

Thank you for attending!

For further information on the project, please follow our website www.itamaproject.eu or contact us on +356 2122 4900 or via email on info@itamaproject.eu

 **Interreg
Italia-Malta
ITAMA**

Fondo Europeo di Sviluppo Regionale
European Regional Development Fund



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ITAMA Project

Interreg Project Number: C1-1.1-18

ICT Tools for the diagnosis of Autoimmune diseases in the Mediterranean Area

LAUNCH EVENT

30th January 2019, 11:00 – 14:30,

Aula Prima, Valletta University Campus, Malta

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PARTNERS



Università di Palermo,
Dipartimento di Fisica e Chimica, Italia (Head)



Università e Policlinico di Messina, Italia



MINISTERO DELLA SALUTE | **MATER DEI** Ministry for Health, Mater Dei Hospital, Malta



acrosslimits AcrossLimits Ltd, Malta

ASSOCIATES

Assessorato Regionale Salute,
Palermo, Italia

COLLABORATORS

Ministry of Education, Malta

What is Coeliac disease?

Coeliac disease is a condition which is characterised by intolerance to gluten. This is found mainly in wheat but also in rye and barley. Literature shows that this condition affects about 2% of the population. Unfortunately, about 90% of the cases remain undiagnosed and consequently untreated. Symptomatic individuals may not attribute the symptoms directly to this condition as the symptoms are rather non-specific such as lethargy, abdominal discomfort, weight loss or weight gain and lack of concentration.

Other individuals are asymptomatic and so unable to recognise the condition unless tested. The burden of the disease can however still be felt, such as reduced performance, reduced productivity and the long-term risk of developing bowel cancer. The condition can be treated using a gluten free diet which reverses the damage and the associated co-morbidities. A person who is found to be coeliac will also be eligible to state aid to purchase gluten free products.

ITAMA Project

The scientific community agrees on the need to improve the methods of diagnosis of autoimmune diseases and on the importance of a multidisciplinary and collaborative approach to achieve this goal. Particularly with regards to coeliac disease, there is the need for an early and more accurate diagnosis, that does not necessitate invasive examinations, especially in children of paediatric age. This would reduce the costs of the disease induced by delayed diagnosis.

Current problems arise from many factors including:

- The accuracy of a test expressed in terms of sensitivity and specificity does not allow us to estimate the predictive value of it without taking the symptoms into account.
- There is a lack of statistical (predictive) information that calculates the probability of illness (pre-test), the symptoms, or a combination of the two.
- Increasing complexity in the management and analysis of biomedical data creates the urgency and need to use computer technology to support doctors in the diagnostic process of diseases.
- Biopsy is Gold Standard for the diagnosis of coeliac disease. The diagnostic costs of an invasive examination can be reduced according to the ESPGHAN 2012 guidelines, which suggest avoiding intestinal biopsy in the presence of symptoms, that together with positive laboratory tests would be predictive of intestinal damage. Unfortunately, less than 10% of suspected coeliac subjects avoid biopsy.

The ITAMA project, funded from the INTERREG V-A Italia-Malta program, will be targeting communities coming from Sicily and Malta. Using a multidisciplinary approach, ITAMA aims to:

- Raise awareness about the coeliac condition and study the disease in these two neighbouring countries sharing a very similar diet.
- Improve the diagnostic process from the concept of test accuracy to utility of the test (predictive value), with the support of ICT tools, currently not available in the scientific community for this pathology.
- The use of the AAC (Anti Actin IgA) test, already tested, performed in sequence with conventional tests, which preaches a compatible intestinal damage regardless of the symptoms, can increase the number of subjects to avoid biopsy. The verification of the diagnostic accuracy of the AAC test in a screening of over 20,000 primary school children in Malta and Sicily carries out a diagnostic algorithm for:
 - a) the increase in the diagnosis of coeliac disease with decreased costs of the disease
 - b) the increase in children diagnosed without biopsy, with a reduction in diagnostic costs
 - c) the diagnostic accuracy of the PoC (Point of Care) test even if the test is negative
- Define tools for technology transfer and/or process innovation in the healthcare sector.

As part of the project, a screening programme is going to be set up to detect the condition before the symptoms develop, allowing early treatment and a better quality of life for affected children. The programme is expected to run during 2019 and will focus on children aged four to twelve years attending all schools of Malta and Gozo (state, church, independent). All participation costs are covered by the project, hence there are no costs involved either for the schools or the children being tested.

A few weeks before the test, the children will be given a take-home booklet containing information about coeliac disease, a questionnaire and a consent form. The questionnaire will include a set of questions related to symptoms and health history of the child or immediate relatives. Those children returning the completed questionnaire including their parents' consent, will proceed to be tested. The screening test is a rapid result, point of care test requiring only a drop of blood from the child. This will be performed by the designated staff who will attend the school grounds on the day of the testing and involves a relatively painless procedure like the finger prick test used by diabetics. The results of the tests will be reviewed by a medical team from Mater Dei Hospital, and those children who test positive shall be recalled and offered further testing in hospital.

The project has been granted permission by the ethics board and all schools are highly encouraged to participate for the benefit of their own students. This project may pave the way for a future screening programme being set up to diagnose the condition at an early age and offer the necessary diet for a healthier, stronger generation.

