

MEDICIS-Promed

“MEDICIS-produced radioisotope beams for medicine”

OUTREACH REPORT

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in the frame of Work Package Nº 6

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Abstract

During the duration of the MEDICIS-Promed project several outreach actions were taken in order to communicate with general public, namely based on presentations in public school and universities, news in the press and social networks, among many other initiatives. In this way, the research work performed within the network was presented to diversified audiences, to achieve an effective outreach output and in light with the “European Charter for Researchers”. This report summarizes the outreach activities developed by the MEDICIS-Promed team.

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1 Introduction

The outreach actions of MEDICIS-Promed took several forms, like Presentations in Schools and Universities, Public Talks, Radio-Talks (and Interviews), Print Media (Articles in Newspapers, Journals, etc.), Lab Visits, etc. The objective was to explain the MEDICIS-Promed research and its benefits to the society, bringing knowledge to a large audience. The main outreach actions that were taken within the four years are summarized in section 2.

2 Outreach Actions

a. Presentations in Schools and Universities

The promotion of the MEDICIS-Promed research field to the new generations and their supervisors, like the students and professors of high-schools and universities, was a main concern of this research project.



Seminars on high-schools, involving around 300 students, were given in the region of Lisbon, Portugal. The 1st seminar, given by Alice D'Onofrio (ESR-8), Prof. Antonio Paulo and Prof.

Antonio Pereira Gonçalves, took place on 14th December, 2016 in one of the best high-schools of the region, the "Escola Secundária Rainha Dona Leonor". The seminar had a great success with participation of around 150 students.

The second one, presented by Prof. Antonio Pereira Gonçalves, was at the “Escola Secundária de Camões”, one of the largest and most prestigious secondary schools in Lisbon, in February 23rd, 2018, and was attended by ~50 students and professors.



The last seminar in high schools was given by Sanjib Chowdhury (ESR-7) and Nhat-Tan (ESR-2) in December 21st, 2018 at the “Colégio Pedro Arrupe”, one of the most famous private secondary schools in Portugal, and involved around 80 students. All seminars were huge attainments, with students making many questions about the details of the MEDICIS-Promed project.



Thierry Stora (the project coordinator of MEDICIS-Promed) was invited to give a Lecture at the University of Oslo, on February 19, 2017, about the CERN-MEDICIS project and the MEDICIS-Promed network.

(<http://www.mn.uio.no/fysikk/english/research/groups/nuclear/events/stora.html>)

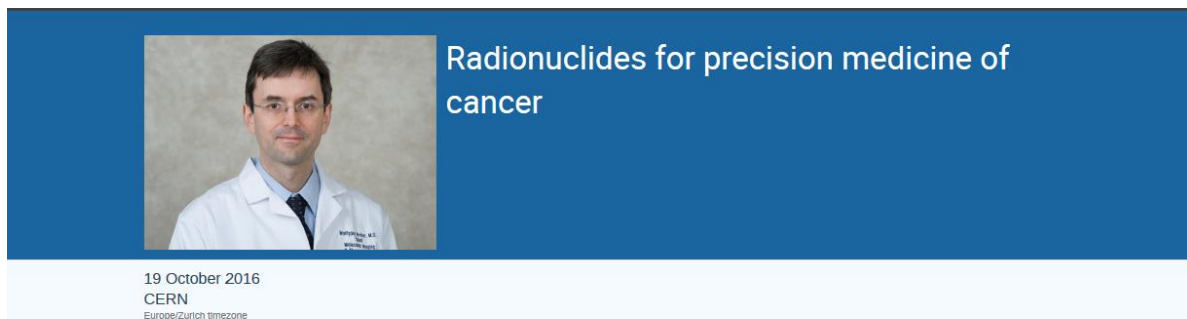
The "MEDICIS-Produced radioisotopes for medicine" seminar was given in March 23, 2018 at the University, in the “Escola Superior da Tecnologia da Saúde de Lisboa” (Lisbon Superior School of Health Technology), by Alice D’Onofrio (ESR-8), in the frame of the school’s 37th Anniversary (<https://www.estesl.ipl.pt/noticias/estesl-comemora-37o-aniversario-durante-uma-semana>).



b. Public Talks and Lectures

A strong effort was made to explain the results of the MEDICIS-Promed project and their relevance to the general public. Public talks and lectures were given with this objective.

A public lecture, organized by Thierry Stora on October 19, 2016, was held by Professor Weber (Memorial Sloane Kettering Hospital/New York) at the Globe of Science and Innovation in Geneva. In this lecture he presented to the public the application of radionuclides for precision medicine of cancer (<http://indico.cern.ch/event/561882/>).



Radionuclides for precision medicine of cancer

19 October 2016
CERN
Europe/Zurich timezone

Biographie / Biography

Inscription / Registration

Affiche / Poster

Contact

✉ cern.reception@cern.ch

Radionuclides for precision medicine of cancer

2nd Grace-MEDICIS Public lecture
by Prof. Wolfgang Weber

Chief, Molecular Imaging and Therapy Service

Department of Radiology - Memorial Sloan Kettering Cancer Center, New York (USA)

Precision medicine aims to fundamentally change cancer therapy and to improve patient outcome by using drugs that specifically target genetic or epigenetic features (that is, well identified and unique fingerprints) of the tumor cells in an individual patient. Radionuclides have unique value to achieve these goals. On the one hand, gamma emitting radionuclides provide the basis for imaging of the expression and function of specific molecules in patients. Because radioactivity can be detected with exceptionally high sensitivity, these imaging studies can be performed safely and are increasingly used to guide the treatment of cancer patients. On the other hand beta- and alpha-emitting radionuclides are two other types of radioactive compounds and can deliver therapeutic doses of radiation selectively to destroy cancer cells. This principle has been used for many years already to treat diseases of the thyroid, but more recently it has been expanded to common cancers, such as prostate cancer. A specific strength is the combination of imaging and therapy with radionuclides: imaging is used to detect the presence of disease and to predict the uptake of the therapeutic radionuclide. This presentation will provide an overview of the principles of these "theranostic" (therapeutic/diagnostics) applications of radionuclides and will provide examples for recent clinical successes in using radionuclides in medicine.

Simon Stegemann (ESR-11) took part in the “Falling Walls Lab” – a sort of pitch event which was held in Leuven on March 15, 2017 – where he presented his research work in 3 minutes to a public audience and a jury who evaluated the contestants.

(<https://www.kuleuven.be/communicatie/wetenschapscommunicatie/iedereen/falling-walls-lab>)

[Home](#) > [Voor onderzoekers](#) > Falling Walls Lab for candidates

FALLING WALLS LAB FOR CANDIDATES



**GREAT MINDS
3 MINUTES
1 DAY**

APPLY NOW!

BE PART OF THE FALLING WALLS LAB LEUVEN
ON 15 MARCH 2017

KU Leuven is looking for candidates who

- > present their research project, business plan, entrepreneurial or social initiative that is relevant to the world of today – in **3 minutes!**
- > convince a top-class jury from academia and business

Who can apply?

- > We are looking for outstanding talents and innovative thinkers from all disciplines
- > **Bachelor and Master students, PhD candidates, postdocs and junior professors from Association KU Leuven** are invited to apply
- > Candidates should be available on presentation training days: **8, 10 and 13 March 2017**

What's in it for you?

A distinguished jury selects the winner who

- > qualifies directly for the **Lab Finale in Berlin on 8 November 2017** (travel costs and accommodation are covered) as one of 100 international and interdisciplinary participants. The three winners of the finale in Berlin will receive a cash prize and will get the opportunity to give their talk on the grand stage of the Falling Walls Conference on 9 november 2017 in front of 600 guests - among them institution leaders and decision makers and a worldwide audience via livestream.
- > is awarded a ticket for the international **Falling Walls Conference on 9 November 2017** where some of the world's most prominent scientists from around the world present their current breakthrough research in 15 minutes each.

[READ MORE ABOUT THE FALLING WALLS LAB](#)



[REGISTER TO BE PART OF THE AUDIENCE AT 15/03](#)

APPLICATIONS are CLOSED

Application deadline:
1 March 2017



PRACTICAL INFORMATION

The Falling Walls Lab takes place on **15 March 2017** at **Het Depot** Martelarenplein 12.3000 Leuven.
Start: 7 pm.

QUESTIONS?

E-mail your questions to
fallingwalls@kuleuven.be

TWEET ABOUT THE LAB: #FallingWalls17

Alice D'Onofrio (ESR-8) presented the MEDICIS-Promed Network in a poster, at the IST PhD Open Days, in Lisbon, Portugal, on the 5th and 6th April 2017. She also participated in a Pitch Competition in the IST PhD Open Days on 6th April 2017, orally introducing the MEDICIS-Promed Network in 5 minutes.



The talk "Nuclear weapons against cancer: what?!", was given by Prof. Thomas E. Cocolios in Science & Pintjes Leuven, a public divulgation event of Science Day in Flanders given in a Leuven bar (KUp), Leuven, Belgium, November 26, 2017. The objectives, the innovative approach, methodology used, and the results already obtained in the project were presented in a simple but rigorous way (<https://cebweb.wordpress.com/2017/11/11/science-pintjes-leuven/>).

Science & Coffee
Leuven
26/11/2017 15:00

Nuclear weapons against cancer: what?!
Thomas E. Cocolios - KU Leuven

Physics lifehacks
Daniel Perez - KU Leuven

Eco-friendly pharmaceutical for a better future
Francisco G. Cirujano - KU Leuven

Cafe KUP
Naamsestraat 22
Leuven

Organizers

doe.mij.maar WETENSCHAP

CEBE Científicos Españoles en Bélgica Spanish Scientists in Belgium

Another presentation of the MEDICIS-Promed project was given on March 9, 2018, by Sanjib Chowdhury (ESR-7) at the JRC-Karlsruhe, Germany. Sanjib has presented his work and the MEDICIS-Promed project to an audience of around 20 experts from that European institution, which was followed by an open and intense discussion.

Science & Pintjes
Brussels
28/09/2018 - 19:00

Solving environmental and energy problems at once
Nuria Martín - KU Leuven

The awesome physics of everyday objects
Daniel Pérez - KU Leuven

Nuclear physics for health
Simon Stegemann - KU Leuven

Address
Café des Halles Saint-Géry /
Agora Brussels
Place Saint Géry 1
Bruxelles

Organizers

CEBE Científicos Españoles en Bélgica Spanish Scientists in Belgium
HALLES SAINT-GÉRY SINT-GORIKSHALLEN
be.brussels

On September 28th, 2018, took place the 3rd Science & Pintjes Brussels, at Café des Halles Saint-Géry/Agora, in Brussels downtown. Simon Stegemann (ESR-11) presented the talk "Nuclear Physics for health" to a large public, highlighting that nuclear physics is a key component in medicine for imaging and treatment of cancers.

c. TV and Radio Talks

Public talks and lectures have the advantage of the direct contact with the public. However, their impact is always restricted to a limited number of participants. The Project Coordinator and other members of the project participated in TV or radio talks and interviews, giving the opportunity to inform and explain the project to a broader audience.

Thierry Stora was invited by a local Swiss TV – Lemman Bleu – on September 5, 2014 to talk about the MEDICIS-Promed project. He took this opportunity to explain the advantages of personalized medicine and the new cancer treatments.

An interview about the MEDICIS-Promed project at the Swiss radio RTS La Première was given by Thierry Stora (the project coordinator of MEDICIS-Promed) and Osman Ratib, Thursday on June 2nd, 2016, where they explain the production of radioisotopes and their use in diagnostics and treatments (https://pages.rts.ch/la-1ere/programmes/cqfd/7733665-medicis-le-programme-medical-du-cern-02-06-2016.html?fbclid=IwAR2Fqa_Nf67RLh7MZFhKVB9cLCsJSvRcbGTfEXI326M-ygL4bOqOf6eGU0Y&mediaShare=1).

Vadim Gadelshin (ESR-5) gave an interview for a local radio on the All-Russian Conference: Research and Development of Next Generation Nuclear Technologies (ROSATOM), Slavsky, Russia, March 27-29, 2018, presenting the use of Laser Resonance Ionization in MEDICIS-Promed project and its objectives (<http://www.niiar.ru/eng/node/4790>)

d. Print Media

Different articles and interviews in newspapers and journals were also used to inform the general public about the MEDICIS-Promed project, as print media can reach a large audience.

Thierry Stora was interviewed by the Swiss newspaper “Tribune de Genève” on September 23, 2014, where he explained the main topics of the project (<https://www.amge.ch/2014/09/23/recontre-avec-thierry-stora/>).



Rencontre avec Thierry Stora
23.09.14 | Rubriques: [Revue de presse](#) | [Lien](#)

Cet article a plus d'un an, les informations pourraient être périmées. Merci d'en tenir compte.

Tribune de Genève Mardi, 23 septembre 2014
Son idée vaut 3 millions d'euros

L'idée a surgi un matin de 2010, en prenant un café avec un collègue. Elle a cheminé pendant deux ans pour recevoir le soutien plein et entier de la direction du CERN. La fortune souriant aux audacieux, Thierry Stora a soumis son projet à la Commission européenne, qui vient d'allouer près de 3 millions d'euros à son projet de recherche, aux limites de la physique et de la médecine. Heureux de son succès, le quadragénaire se livre avec gaieté, oubliant parfois que les faisceaux de protons restent un mystère pour le commun des mortels.

Sauts dans l'inconnu

Elevé en France par des parents scientifiques – sa mère est astronome de formation, son père, Raymond Stora, physicien renommé, siège à l'Académie des sciences – le jeune Thierry s'oriente, «par goût», vers des études scientifiques. Il va vite. Baccalauréat à 17 ans, diplôme d'ingénieur à 22 ans, doctorat en chimie-physique à 25 ans. Dans son parcours, il évoque des «moments de flottement», des «sauts dans l'inconnu», qui lui ont finalement porté chance. Comme son départ à Pittsburgh à l'âge de 19 ans pour un an d'échange. «Je ne parlais pas un mot d'anglais. Le premier jour a été très dur. Puis ce fut l'immersion totale. Maintenant, l'anglais est l'une de mes deux langues de travail».

Après les études, Thierry Stora choisit l'industrie. Il est engagé par Firmenich. «L'entreprise a une forte réputation de recherche, elle travaille avec des Nobel. Mon équipe a déposé une dizaine de brevets.» Notamment pour des parfums sans alcool – «c'est très compliqué» – ou des additifs permettant à l'assouplissant de lessive de ne pas se figer lorsqu'on lui ajoute du parfum.

A 35 ans, le physicien revient à une recherche plus académique. Le CERN ouvre des postes. «Quand l'offre s'est présentée, je n'ai pas hésité une seconde.» Aujourd'hui, Thierry Stora a 44 ans. Marié et père de deux enfants, il se situe à un tournant. Le financement européen lui donne des ailes. Il y a peu, tout cela lui paraissait «inespéré»: environ mille projets étaient soumis à la Commission européenne dans le cadre du programme Horizon 2020. Une centaine a été retenue. «Le sien en fait partie avec, ce qui ne gâche rien, «une très bonne note scientifique, ce qui accroît notre crédibilité».

Tuer les tumeurs

Le programme de recherche, qui débutera en 2015, vise à élaborer une technique pour cibler et détruire les cellules cancéreuses, grâce à un dosage précis d'isotopes radioactifs, c'est-à-dire des atomes au noyau instable et radioactif, produits par le CERN. L'imagerie médicale les utilise déjà, notamment pour révéler un cancer. Le projet Medicis-Promed, que coordonne Thierry Stora, consiste à affiner le procédé: «On pourrait utiliser un isotope pour localiser un cancer puis employer un autre isotope du même élément chimique pour brûler la cellule cancéreuse, sans abîmer les tissus sains.» L'espoir est d'aboutir à un traitement personnalisé, moins nocif que la chimiothérapie. Le chercheur garde les pieds sur terre. Il sait que le chemin sera encore long avant des débouchés cliniques, qu'il espère dans dix ou vingt ans. Il souligne ce qu'il doit à son ami ingénieur Stephano Marzani (celui du café), et à l'oncologue Michel Forni, auquel il rend hommage, car il lui a permis de constituer un réseau auprès des hôpitaux universitaires de Genève, du Centre hospitalier universitaire vaudois et de l'Institut suisse de la recherche expérimentale sur le cancer de l'EPFL. Désormais, une équipe est constituée au CERN, qui sera complétée par une quinzaine de jeunes chercheurs européens et suisses qui pourront être engagés grâce à l'argent européen. Le CERN organise une présentation du projet et une visite du bâtiment le 15 octobre. Sophie Davaris

[Retour à la liste](#)

The MEDICIS-Promed project was a feature in two CERN COURIER's, in October 2016 and January 2018. CERN COURIER is an electronic divulgation journal of CERN, distributed to thousands of persons. The MEDICIS facility was the cover in one of such editions.

<https://cerncourier.com/cern-to-produce-radioisotopes-for-health/>

<https://cerncourier.com/isotopes-for-precision-medicine/>



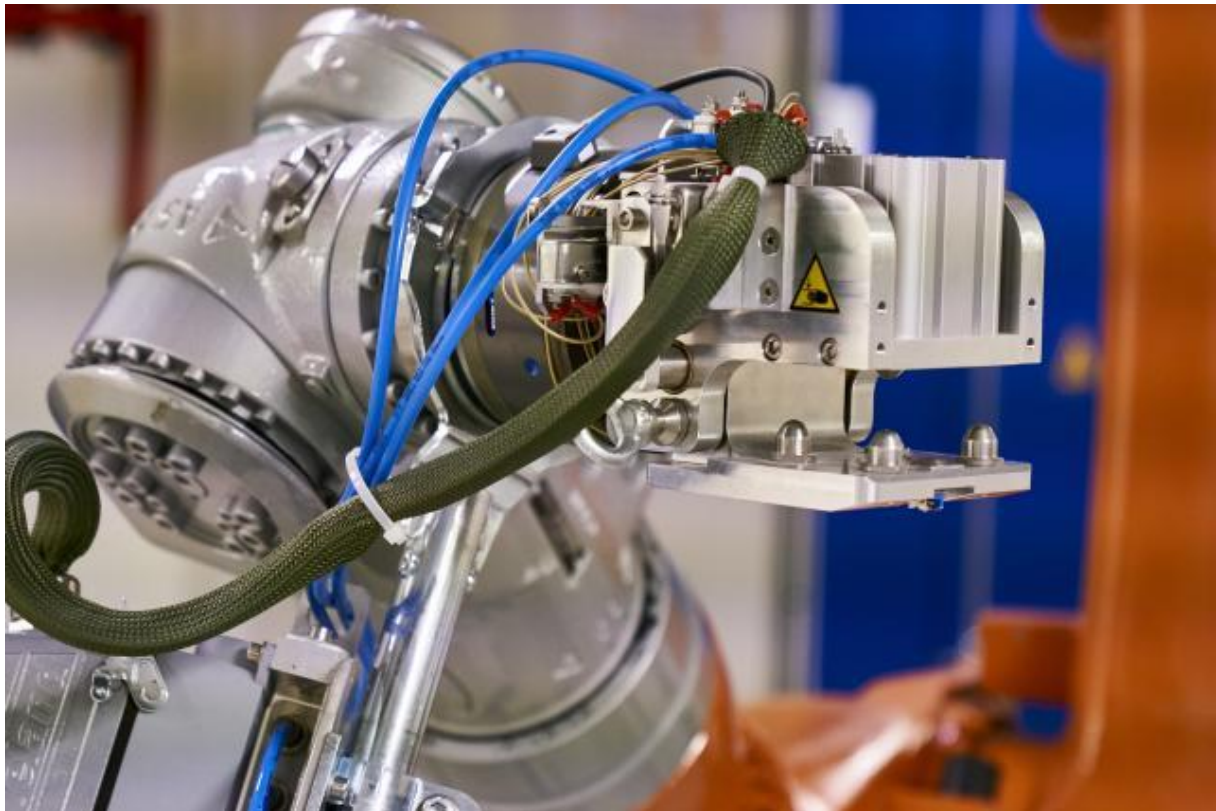
A MEDICIS-Promed divulgation article from the UK Science And Technology Facilities Council at the *UK News from CERN* was published on January 2017. It first gives a general overview of the project and then focus on the work of Marina Nazarova (ESR-4) at the University of Manchester.

<https://stfc.ukri.org/news-events-and-publications/publications/uk-news-from-cern/uknfc75/?fbclid=IwAR3VufGrWjD79bZqY9gseKMLaVuuBtXksL4wI90VQkoR6HVe4f6-IXEoAxc#one>



A divulgation article on the MEDICIS facility and MEDICIS-Promed project was presented in December 2017 at the Joint Institute for Nuclear Research in Dubna, Russia

http://www.jinr.ru/posts/izotopy-iz-tserna-protiv-raka/?fbclid=IwAR3HyvDNAd5gU4CDawDTZ0x7zBdoeVL_qHeZ7_aWAwd825CdtWSbRlqzx1k (in Russian)



The French journal *Ouest-France* has published an article September 28, 2018, about the 12th International Workshop “Imaging and therapeutic targeting in cancerology: New advances and trends in preclinical & clinical studies”, Bono, France. In this article, Alice D’Onofrio (ESR-8) was interviewed and presented the MEDICIS-Promed network.

https://l.facebook.com/l.php?u=https%3A%2F%2Fwww.ouest-france.fr%2Fbretagne%2Fvannes-56000%2Fmorbihan-cancer-ces-chercheurs-planchent-sur-l-imagerie-du-futur-5989499%3Ffbclid%3DIwAR1PKsYrGVh2ItUI2-okbgn8GS9BdL9_Hyv45BSr4XwwF8hSJkkFdvAD7CA&h=AT2mp9Fof0wyuGnzEcEVObl

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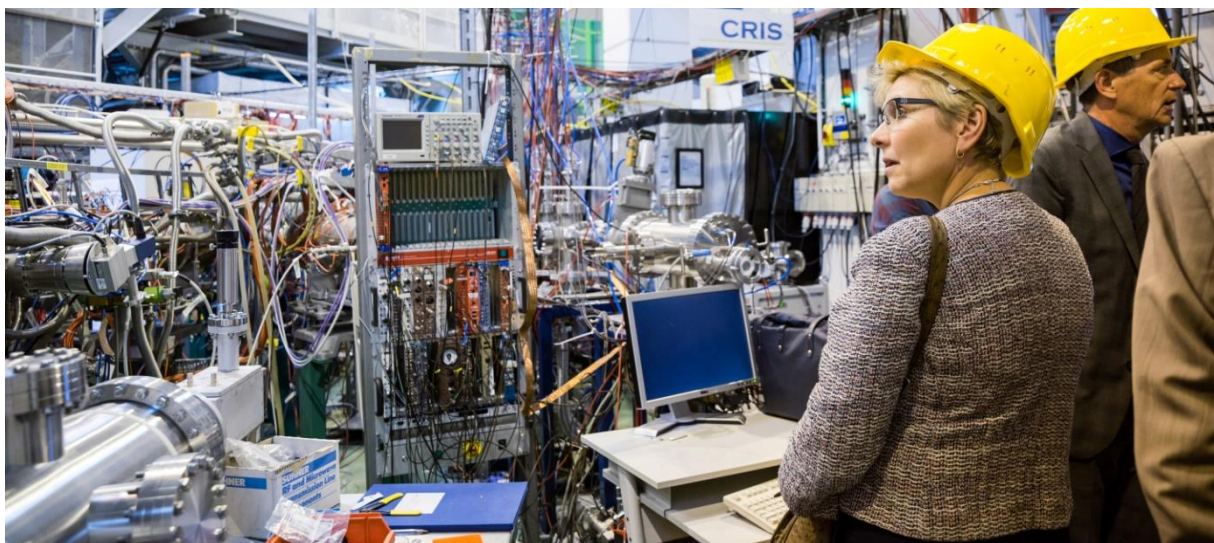


e. Lab Visits

Targeted publics were also addressed by the MEDICIS-Promed network, namely by the organization of several one- or half-day visits to the CERN/MEDICIS facilities and laboratories. The most relevant ones are described below.

A group of medical doctors, PhD students and experts in nuclear medicine from the IRIST workshop was invited to visit the CERN-MEDICIS facility and take contact with the MEDICIS-Promed project on May 28, 2016, being guided through by Nhat Than Vuong (ESR-2).

Annie Ringvall Moberg (ESR-1) presented in September 28, 2016 the MEDICIS-Promed network and its activities during a visit of the State Secretary from Belgium, Ms Elke Sleurs.



Johanna Pitters (ESR-3) organized an expert visit at CERN for researchers from the National Institute of Radiological Sciences, NIRS, Japan, between November 1-3, 2016. During this visit, the MEDICIS-Promed objectives and results were briefly presented.

Maddalena Maietta (ESR-10) presented the MEDICIS-Promed Network to Marianne Thyssen (European Commissioner) during an official visit to the CERN-MEDICIS and ISOLDE facilities in March 10, 2017.



Around 50 students from KULeuven, Belgium, have visited the CERN-MEDICIS facility on April 20, 2017, being guided through by Nhat Than Vuong (ESR-2).

Hélène Langevin-Joliot, granddaughter of Marie Skłodowska & Pierre Curie, has given the lecture “Les Femmes et la Science D’Hier à Aujourd’hui” at CERN on June 29, 2017. In June 30, 2017 she profited to visit the MEDICIS laboratories and facilities at CERN, and the MEDICIS-Promed project was presented in detail by Thierry Stora.



In February 7, 2018, Thierry Stora (the project coordinator of MEDICIS-Promed) presented the CERN-MEDICIS facility and the MEDICIS-Promed network to H.E. Mr. Geert Muylle, the Permanent Representative of Belgium to the United Nations Office in Geneva.

On Tuesday, April 17, 2018, Annie Ringvall-Moberg (ESR-1), Nhât-Tân Vuong (ESR-2) and Roberto Formento Cavaier (ESR-6), together with Thierry Stora, accompanied the Minister of Sciences and Education of Latvia in the visit of MEDICIS facility at CERN.



On November 2018 the MEDICIS facility was visited by Prof. Chi Van Dang (Ludwig Cancer Research) and Prof. George Coukos (CHUV/Centre Hospitalier Universitaire Vaudois), accompanied by Prof. John Prior (CHUV) and Ms. Manuela Cirilli (IPT-KT-MA). The MEDICIS-Promed project was presented by Thierry Stora (the project coordinator of MEDICIS-Promed).



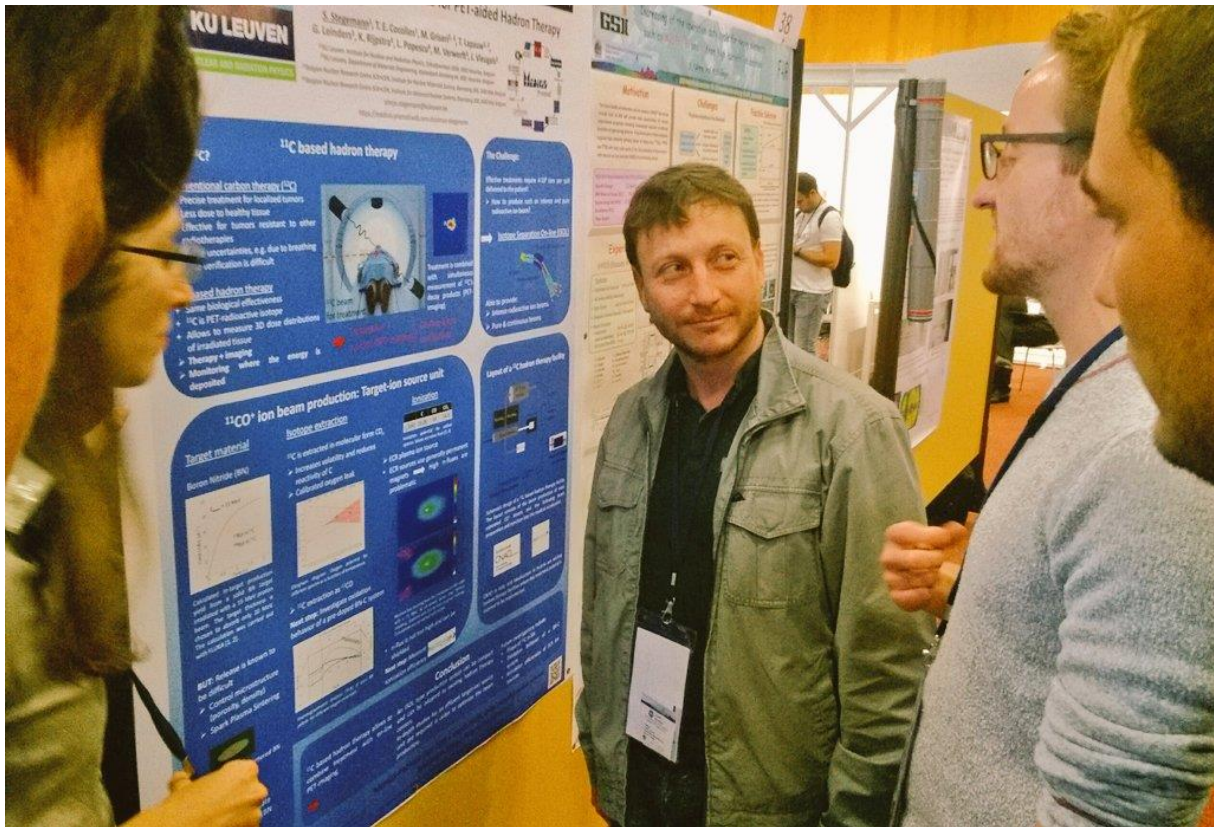
f. Video

A video about the MEDICIS-Promed network, to be released in the internet, was recorded. All ESR were deeply involved in the feature of this video, where they briefly explain their role in the project.



EU for facts: Evidence for policy in a post-fact world conference, Brussels, Belgium, September 26, 2017.

17th International Conference on Ion Sources, Geneve, Switzerland, October 15-20, 2017.



30th Annual Congress of the European Association of Nuclear Medicine, Vienna 2017, Vienna, Austria, October 21-25, 2017.

9th International Conference on Isotopes & Expo, 9ICI, Doha, Qatar, November, 12-16, 2017.

48^{èmes} Journées des Actinides, JdA2018, Praia de Porto Novo, Portugal, March 21-24 2018.

"MEDICIS-Promed", a project to produce radioisotope beams for medicine: an actinide perspective

A.P. Gonçalves,¹ S. Chowdhury¹, M. Nazarova², K.S. Novoselov² and T. Stora³

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³ ISOLDE, CERN, CH-1211 Genève 23, Switzerland

Introduction
 Cancer personalized medicine uses radioisotopes for imaging and targeted radionuclide therapy. However, their availability, isotopic purity and quality are critical issues. The ISOL method can contribute to overpass such problems. In this method, high-purity radioactive ion beams are produced by hitting a suitable target with high-energy ions (usually protons).

1. Proton bombardment
 From the PS Booster a pulse of 3e¹³ protons (1 GeV) hits a thick primary target every 1.2 s. It produces radioactive nuclides in spallation, fission and fragmentation reactions.

2. Ionization
 The nuclides diffuse from the heated target into an ionizer, where they are ionized mainly to 1+ charge state.

3. Acceleration
 The 1+ ions are extracted from the ionizer and accelerated to 60 keV. The ion yield varies from 1e⁹ to few ions/s.

4. Mass separation
 In the primary target a wide variety of isotopes is produced, which are separated by a magnetic analyzer.

MEDICIS-Promed is a Marie Skłodowska-Curie ITN that integrates research institutions, private companies and medical schools and intends to train 15 entrepreneurial scientists to be able to develop and test innovative radiopharmaceuticals and imaging agents for personalized treatments. It is organized around 3 scientific work packages: WP1) Mass separation of new medical isotopes, WP2) PET-aided ¹³Carbon hadron therapy and WP3) New theranostic pharmaceuticals/surgery tools for personalized treatments of ovarian cancer. WP1 is directly related to actinides, namely to the development of original U-based targets for more efficient production of medical isotopes.

WP1 comprises the investigation of uranium carbide nanofibers targets for increased stability and extraction yield of α-emitting radioisotopes. Details can be obtained from the oral and poster presentations entitled "Recent developments in UC₂ target at C²TN" and "Nano-UC₂ target for CERN-MEDICIS facility", respectively.

Another WP1 activity related to new U-based targets consists on the development of metallic foil targets with protective graphene layers to produce innovative isotopes. It has as objective to study the possibility and mechanisms of graphene growth on uranium, thorium and other metals to form a protective layer against corrosion. Preliminary results of the graphene growth on transition metals and its protective properties are presented on the poster entitled "CVD growth of graphene on proton irradiation targets: the case of tantalum".

25th Conference on Application of Accelerators in Research and Industry, Texas, USA, August 12-17, 2018.

World Molecular Imaging Congress 2018, Seattle, USA, September 12-15, 2018

*18th International Conference on Electromagnetic Isotope Separators & Related Topics,
Geneve, Switzerland, September 16-21, 2018*

h. Social media platforms

MEDICIS-Promed accounts have been created on the following social networks:

LinkedIn (<https://www.linkedin.com/company/medicis-promed/>)

Facebook (<https://www.facebook.com/medicispromed/>)

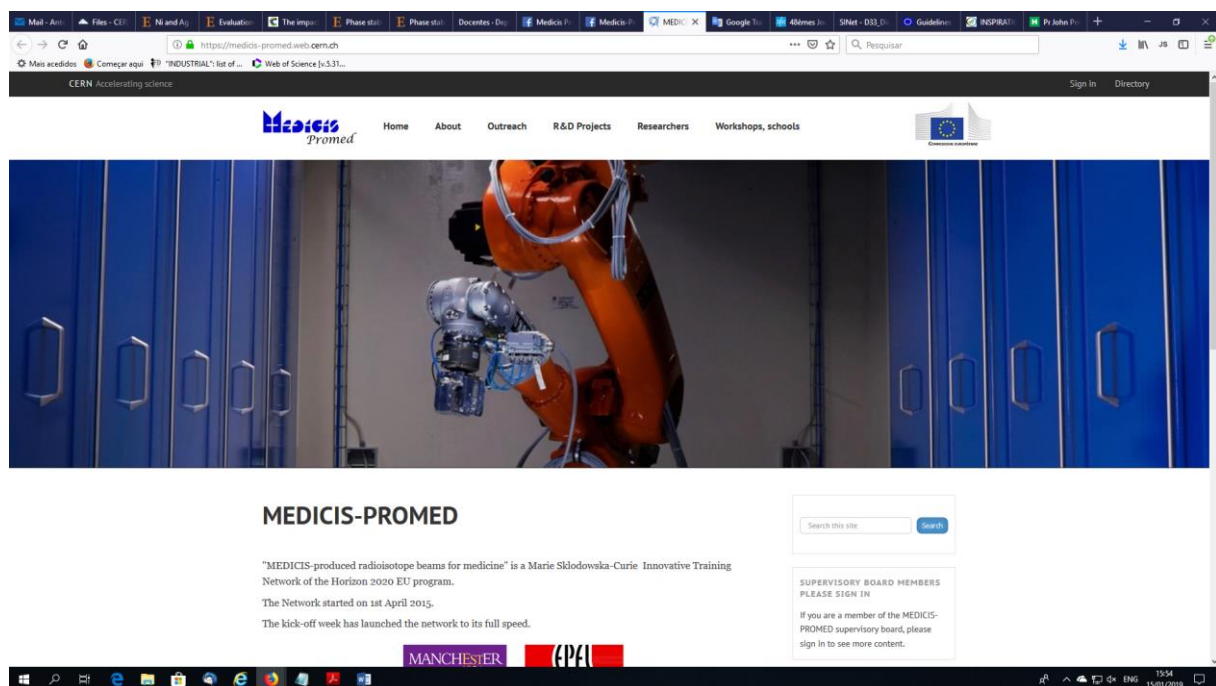
Twitter (<https://twitter.com/MedicisPromed>)

The last two in particular were routinely used to disseminate news and updates about the ongoing research activities, participations in conferences, lectures, visits, interviews, etc. Around 200 publications and 200 tweets were published in these platforms.



i. Webpage

A webpage of the MEDICIS-Promed network was settled and is updated regularly (<https://medicis-promed.web.cern.ch/>). It contains the main basic information about the project, with particular details about the Young Researchers, their studies, contributions and training activities.



j. MEDICIS-Promed young scientist award

The MEDICIS-Promed Prize for young talented graduated PhD researchers was organized and launched. This prize covers the following fields, which are most relevant to the project:

- Accelerator technologies (target, ion sources, other) for medical isotope production;
- Development of hadron therapy with PET radioisotope beams;
- New theranostic tools for cancer management.

Calls are open yearly and an expert committee makes the young scientists selection. The selection is based on his/her research results and the prize is presented at a large international scientific conference.



The first prize, in the field of accelerator technologies, was given at the ICIS2017 conference to Yisel Martinez Palenzuela, Johanna Pitters (ESR-3) and Reinhard Heinke.

Final Conference

The Final Conference on **MEDICIS-Promed** and related science topics will be held at

"The Ettore Majorana Foundation and Centre for Scientific Culture"

Erice (Italy) 30th April - 4th May 2019



The next 2 prizes, on the *development of hadron therapy with PET radioisotope beams* and the *new theranostic tools for cancer management*, are expected to be given at the MEDICIS-Promed Final Conference, which will be held at "Ettore Majorana Foundation and Centre for scientific Culture" in Erice (Sicily), Italy, from the 30th April to the 4th May 2019.

k. MEDICIS-Promed contest

A competition between 2 teams of ESRs (ca 6-8 each) will be launched at the end of the MEDICIS-Promed project. They will compete during 24 hours with the aim of performing imaging tests as well and as fast as possible. One team will be located at CHUV while the other will be at CNAO. They will start by producing isotopes at CERN-MEDICIS and travel to CNAO for one team, with the other travelling from ILL to CHUV. Both teams will perform the synthesis of the radiopharmaceutical upon arrival and prove its activity by imaging in a model system. This will be reported by video and a summary will be broadcasted in the local networks.

1. MEDICIS-Promed project brief

A Project Brief was written and edited. Its purpose is to communicate with general public, giving information about the of MEDICIS-Promed project in a simple but rigorous way. It first addresses the societal reason for the project set-up and the type of solutions that are proposed in MEDICIS-Promed. Then, the participants and network organization are described. Finally, the most relevant results, together with a brief description of outreach activities and societal impacts, are presented.

(Place and date)

Signature

Antonio Pereira Gonçalves

(Place and date)

Signature

Antonio Rocha Paulo