**Faculty of Biology, Sofia University "St. Kliment Ohridski" and Agrobioinstitute**

**Science Squared Programme**

Between 9 and 10 November 2016 the Faculty of Biology, Sofia University "St. Kliment Ohridski" and Agrobioinstitute will host a Science Squared pop-up stand themed "Food”. Parallel activities are planned to be organized with the University of Food Technologies, Plovdiv and Maritsa Vegetable Crops Research Institute (MVCRI), together with representatives of the scientific community, students, farmers, adolescent population - children and students, all interested in the theme.

The events aim to promote food awareness, affecting issues such as daily eating habits, interesting facts about the popular and not so popular fruits and vegetables, the benefits of healthy nutrition, how to introduce fruits and vegetables in our diet, what are the processes of creation and cultivation of different varieties, climatic challenges, etc.

Sessions related to the ERC job and process application are planned to present best practices, previous competitions, opportunities for young researchers and rewards for successful ERC-funded research projects.

Project events:

1. ***Discussions on foods of the future***
2. ***Science lectures on contemporary food themes***
3. ***Science workshops on ERC opportunities and the process of application***
4. ***Science cafes on vegetables***
5. ***Demonstration of new varieties of vegetables***
6. ***Degustation of popular foods – fruit and vegetables***

The programme of events will be carried out by the Faculty of Biology, Sofia University "St. Kliment Ohridski" and Agrobioinstitute.

**Where:** Lobby of Faculty of Biology

**When:** 9-10 November 2016, a pop-up stand will be available for students, teachers, researchers and guests

**Start:** 9 November 2016 on 13:00 PM

**End:** 10 November 2016 17:00 PM

***Let’s fun and research together!***

***The activities of project events will be started in Plovdiv at UFT, but the Pop-up stand will be exposed in Sofia at the lobby of Faculty of Biology, Sofia University "St. Kliment Ohridski" and Agrobioinstitute.***

**Faculty of Biology, Sofia University "St. Kliment Ohridski" and Agrobioinstitute**

***Science Squared Programme***

***Wednesday November 9, 2016***

**Introduction**

Importance of wild blueberries in Bulgaria and assessment of their quality

Wild berry species possess their popularity due to their traditional use as a valuable source of nutrients for human health. Most popular of them in Bulgaria are the red (Vaccinium vitis-idaea) and black (Vaccinium myrtillus L) blueberries , which are widely used in medicine, cosmetics, food and pharmaceutical industries, making them of economic significance.

Extracts from both types of cranberries are marketed in the form of medicine for the treatment of ophthalmic diseases, disorders of blood vessels, urinary and digestive tracts. Blueberry leaves have traditionally been used in traditional medicine for treatment of diabetes. The fruits of blueberries have proven antibacterial and antiviral activity. While researching anthocyanin pigments of bilberry, some research teams reported significant differences due to the plant’s latitude, longitude and altitude. Given this, there has been an increased interest in foods from specific geographic origins over the past decade.

The events will be open to the public on 09 November, 2016 at Faculty of Biology, Sofia University “Sv. Kliment Ohridski”,

1164 Sofia, 8 Dragan Tsankov Blvd

**Expected visitors:** students, scientists and farmers (at least 40 people)

|  |  |
| --- | --- |
| **Wednesday November 9,2016  AGROBIOINSTITUTE** | ***WILD BLUEBERRIES - FOOD AND HEALTH*** |
| **13:00-13:15** | ***Registration*** |
| **13:30-14:45** | ***Welcome address by the host*** *- Prof. Rositsa Bachvarova, PhD* ***Introduction for ScienceSquered project*** *- Theme FOOD - Prof. Albena Vutsova, PhD*  ***Presentation of the Heart Healthy Hoods project funded by the ERC*** *–**Ms.**María Urtasun* |
| **14:45-15:00** | ***Coffee Break*** |
| **15:00-15:30** | *Photochemical variety in fruits and leaves of red and black blueberry, assessed by spectrophotometric methods - Assis. Prof. Ivayla Dincheva* |
|  |  |
| **15:30-16:00** | ***Degustation of black and red blueberry*** |
|  |  |
| **16:00-16:30** | *Assessment of genetic diversity among populations of wild blueberries by microsatellite DNA analysis (SSRs) - Assist. Ilian Badzhakov* |
|  |  |
| **16:30-17:00** | *Determination antiviral activity of extracts of wild blueberry / red and black on human health - Assoc. Lubomira-Glomb* |
|  |  |
| **17:00-17:30** | ***Quiz and Discussion of future Food and Closing*** |

**Faculty of Biology, Sofia University "St. Kliment Ohridski" and Agrobioinstitute**

**Science Squared Programme**

***Thursday November 10, 2016***

**Introduction**:

The AgroBioInstitute and Faculty of Biology will open doors on 10 November 2016 to make the scientific community and the general public acquainted with the important topic of our lives "Food."

All participants will participate in lectures on the role of the ERC and obtain useful information how they can be successful in the European Research Area.

The public will have the opportunity to participate in various discussions that will help promote science in daily eating habits and how other scientific fields are related to the theme Food.

The events will be open to the public on 09 November, 2016 at Faculty of Biology, Sofia University “Sv. Kliment Ohridski”,

1164 Sofia, 8 Dragan Tsankov Blvd

**Expected visitors:** students, scientists and citizens (50-70 people)

|  |  |
| --- | --- |
| **Thursday November 10, 2016  AGROBIOINSTITUTE** | ***Food in the Science*** |
| **11:30 – 12:00** | ***Registration*** |
| **12:00 – 13:30** | ***Introduction for ScienceSquered project*** *- Theme FOOD - Prof. Albena Vutsova, PhD*  ***The role of ERC in Science Research –*** *Prof. Ivan Nedkov* |
| **13:30-14:00** | ***Discussion: How can we be successful with ERC?*** |
| **14:00-14:30** | ***Coffee Break*** |
| **14:30-15:00** | ***“The nanomaterials in foods and novel foods”*** *– Prof. Margarita Apostolova, PhD* |
|  |  |
| **15:00-15:30** | ***“Wheat - healthy food and medicine from nature”*** *- Dr. Svetlana Landjeva* |
|  |  |
| **15:30-16:00** | ***Discussion and closing*** |

**Maritsa Vegetable Crops Research Institute (MVCRI), Plovdiv**

**Science Squared Programme**

**Introduction**

Vegetables are an important part of a healthy diet, some of the most nutritious foods for humans, true gift of nature, a source of health and longevity. They are extremely rich in vital substances for the body: vitamins, mineral salts, easily digestible carbohydrates, fiber, organic acids, water and others. But to make the most of these qualities, one should pay attention to the vegetable variety and the way of growing. We increasingly talk about organic production of vegetables and getting products free from pesticides, nitrates and other harmful ingredients.

The laboratories of the Maritsa Vegetable Crops Research Institute (MVCRI), Plovdiv are devoted on creation of varieties with valuable agronomic traits, resistant to various diseases as well on soil fertility as an important media for healthy vegetable production.

**Two events are envisaged within the program:**

1. **Science café: “Vegetables as a source of healthy food”**

The event will be open to the public on **09 November 2016** at Maritsa Vegetable Crops Research Institute, 32 Brezovsko shosse str., Plovdiv 4003, Bulgaria.

|  |  |
| --- | --- |
| **Timing** | **Activities** |
| **13:00-13:15** | Registration |
| **13:15-13:30** | ***Welcome address by the host*** - Assoc. Prof. Dr. Dimitrina Kostova  ***“The Science Squared project and future events in November 2016”*** – presentation of Tomas Rehacek, represented by *Assos. Prof. PhD. Stayko Kolev* |
| **13:30-13:45** | Presentation1: How to obtain healthy vegetable production – Ass. Prof. Ts. Dincheva |
| **13:45-14:00** | Presentation 2: Why the virus resistant vegetable varieties guarantee healthy yield – Ass. Prof. G. Pasev and Dr. V. Radeva |
| **14.00-14.15** | Presentation 3: Ecological alternatives to improve the soil fertility – guarantee for high quality and healthy vegetable production – PhD student R. Markova |
| **14.15-14.45** | ***Demonstration of new Maritsa VCRI vegetable varieties*** |
| **14.45-15.15** | **Coffee Break** |
| **15:15-15:45** | **Discussion and Closing** |

## Expected visitors: students, scientists and farmers (at least 40-50 people)

## Science in the City – “What do we know about vegetables?”

## Get-together with children from kindergarten Nezabravka, age of 6. The event will be open to the public on 10 November, 2016 at Kindergarten “Nezabravka” Str. “Yuri Venelin” 2A, Plovdiv 4003, Bulgaria.

|  |  |
| --- | --- |
| **Timing** | **Activities** |
| **10:00-10:15** | ***Welcome address*** *by*Assoc. Prof. Dimitrina Kostova ***Introduction for Science Squared project and benefits of healthy nutrition*** |
| **10:15-10:45** | **“Vegetables also have families"** – two families will be officially introduced to children: Potato family (*Solanaceae*) consisting of potatoes, tomatoes, peppers and eggplant and Cabbage family (*Brassicaceae*) embracing cabbage, cauliflower, broccoli and Brussels sprouts; Assoc. Prof. I. Tringovska and Assis. Prof. T. Dincheva. |
| **10:45-11:00** | ***Refreshments*** |
| **11:00-11:30** | ***Games with paintings, puzzles, etc.***  Assoc. Prof. I. Tringovska and Assis. Prof. T. Dincheva. |

## Expected visitors: children, teachers, scientists (approx. 50 people).

**UNIVERSITY OF FOOD TECHNOLOGIES - PLOVDIV**

**Science Squared Programme**

The event will be open to the public on 08 November 2016

26 Maritsa Blvd., 4000 Plovdiv

|  |  |
| --- | --- |
| **Tuesday November**  **8 ,2016  AGROBIOINSTITUTE** | ***LEGUMEs AND GRAINs FOODS –***  ***HISTORY, TRADITION, HEALTH EFFECT AND SCIENCE*** |
| **10:00 - 10:10** | ***Registration*** |
| **10:10 - 10:30** | ***Welcome address*** *by the host*  ***“The Science Squared project and future events in November 2016” –*** *presentation of Tomas Rehacek, represented by*, represented by *Prof. PhD Ivan Nedkov* |
| **10:30 - 10:45** | European Research Council (ERC), Keynote presentation by *Prof. PhD Ivan Nedkov* |
| **11:00 - 11:45** | ***"Effect of Processing of Legumes and Grains Nutritional Substances“*** *presentation by Prof. Dr. Iordanka Alexieva* |
| **11:45 - 12:15** | ***“Legumes and Grains in Sacred Food”*** *presentation by Assoc. Prof. Dr. Iliana Milkova* |
| **12:00 - 14:00** | ***Sacred Traditional Foods and New Products Based on Legumes and Grains*** *– tasting of various foods* |
| **14:00 - 18:00** | ***Poster session “Legumes and Grains in Traditional and Contemporary Cuisine”*** *– participation by university, vocational, secondary and primary school students* |
| **18:00 - 19:30** | ***“Legumes and Grains in Arts and Science” workshop*** *–*  *various activities like drawings with grains and legumes, chemical reactions, discover the structure of legumes by microscope, etc.- participation by university, vocational, secondary and primary school students and children* |

**Expected visitors:** students, scientists and citizens (50 – 70 people).