





# Smart Spacialisation Strategy of Montenegro



S3 framework development strategy important for EU integration

ICT

Sustainable agriculture and food value chain

Energy and sustainable environment

Sustainable and health tourism

# S3 strategy development – „entrepreneurial discovery - EDP“

More than 50 EDP workshops, 4 big conferences, more than 500 participants in the process





# Smart Specialization Strategy (S3) – key features

S3 is an important driver of development and prosperity and includes:

- Entrepreneurial discovery (science-technology-innovation)
- Convergence of initiatives, projects and stakeholders
- Structural change (“creative destruction”)
- Aspirational vision (roadmaps, action plans)
- But not:
  - “Horizontal” support of all sectors and domains
  - “Central planning” by decision makers (public or private)

Source: After Foray, 2012

# From Smart Specialisation to Sustainable Smart Specialisation (S3 >> S4)

- “Made in EU” approach to optimise research and innovation investments in EU regions and Member States
- Deepening Smart Specialisation also means **encompassing the sustainability dimension**, delivering on the agenda of the European Commission and achieve **competitive sustainability**.
- Beyond its economic and social aspect, the green dimension of Smart Specialisation will be further enhanced, **in line with the European Green Deal**.
- Altogether, this will pave the way for economically, socially and environmentally robust and modern Smart Specialisation, in a nutshell sustainable Smart Specialisation.

Source: Mikel Landabaso Álvarez, JRC - EC

**EUROPE WILL BE  
CLIMATE  
NEUTRAL BY  
2050**

European Climate Law - 2020



EU will become global green leader and will embed climate issues in its international relations



Projects which EU will fund will speed up the Green transition  
Europe will put its biodiversity on the path of recovery until 2030



New European Bauhaus – driving force which enacts the Green Deal in attractive, innovative and human – centric way



Public and private financial instruments for new economic opportunities  
Just transition – special support for regions and sectors particularly affected by the green transition

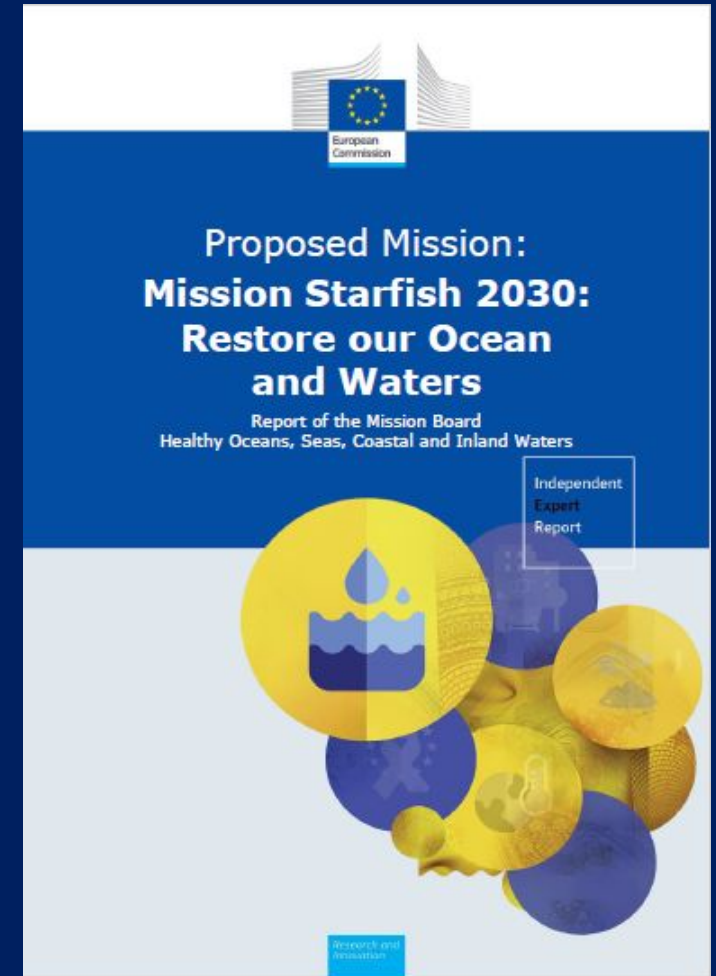


# Example: Horizon Europe (2021 – 2027)

- [Mission Starfish 2030: Restore our Ocean and Waters](#)

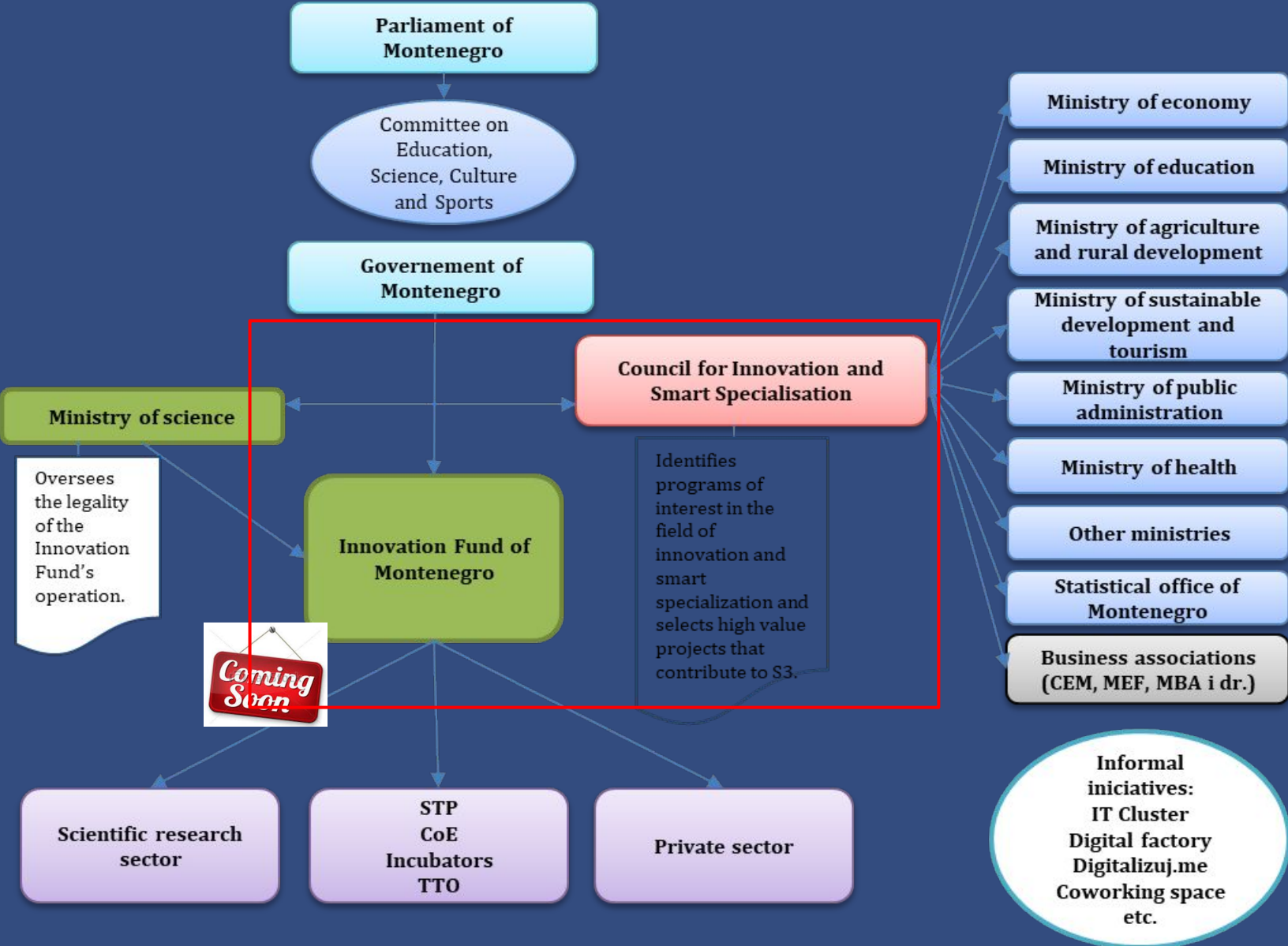
Targets by 2030: cleaning marine and fresh waters, restoring degraded ecosystems and habitats, decarbonising the blue economy in order to sustainably harness the essential goods and services they provide.

What can we do to achieve a common mission?





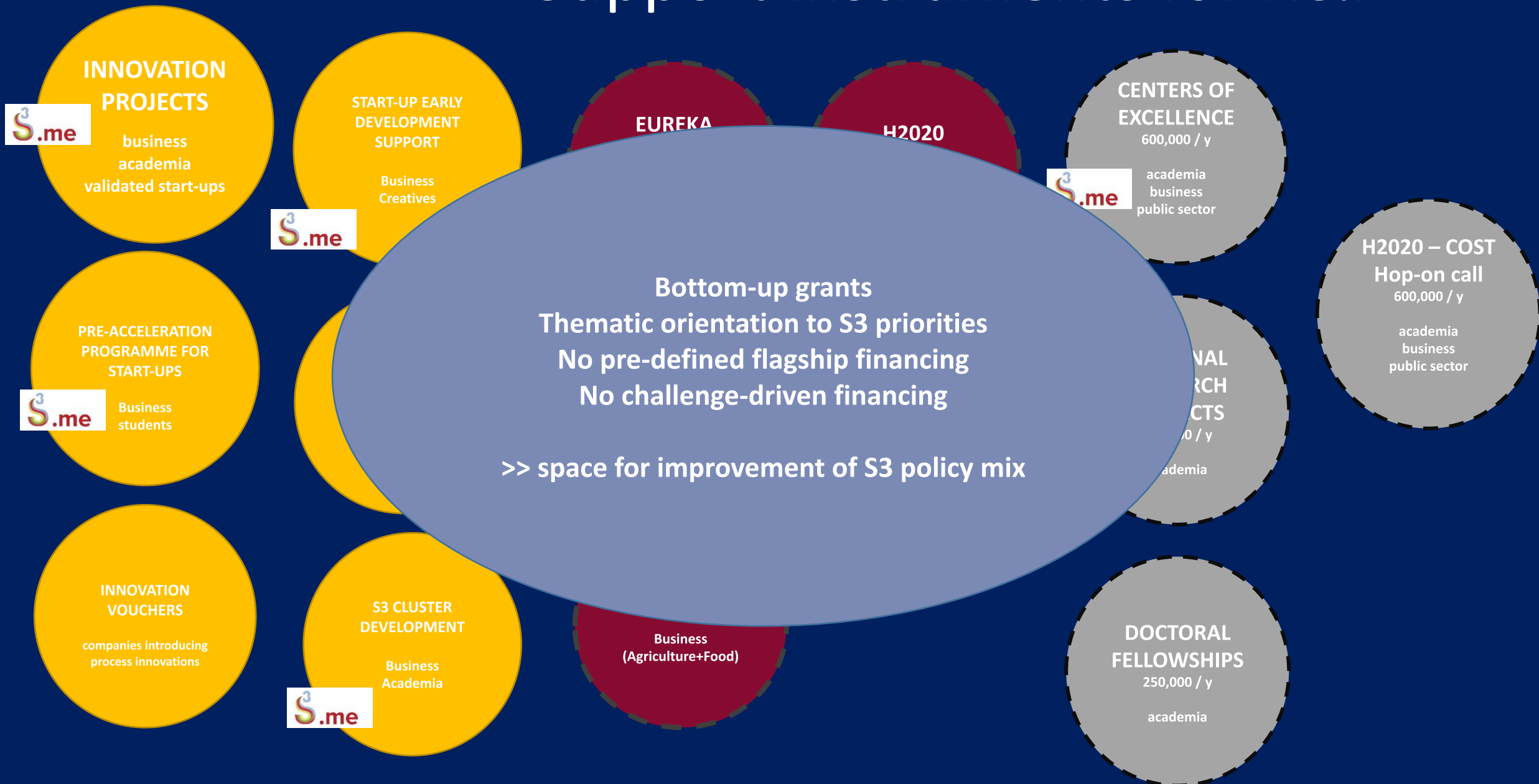
# Montenegrin Innovation System



New structures introduced as part of S3 strategy adoption (legal changes Aug 2020)

n.b: picture is not updated with new Gov structure

# Support instruments for R&I



# Current activities

- Active project of the JRC to support creation of the **Operational Programme for S3 >> better programming**
- Regional project: Smart Specialisation (S3) implementation framework in Enlargement & Neighbourhood countries (JRC - in course)
- S3 embedded in the Economic Reform Programme 2021-2023
- Innovation Fund of Montenegro to be established as a central implementing institution
- New Council for Innovation and Smart Specialisation to be established
- Stimulating innovation legislation being prepared for implementation
- S3 ICT Cluster - under contracting



Examples of supported projects in the past 4-year period  
which support S3 development

## Centre of excellence for biomedical research – CEBIMER

Institut "Dr Simo Milošević" - Igalo

1. Development and application of apheresis therapy as a preventive medicine offer;
  2. Full characterisation of healing sea mud from Igalo basin
  3. Full characterisation of selected autochthonous plants from ME for the purpose of nutritive therapy
- 2020-2022

**Project:** Balneological effects of peloid, mineral water and aromatic plants at reumathoid and cardiovascular diseases - BEPMARK  
Institut "Dr Simo Milošević" - Igalo  
2018-2020

**CEBIMER**  
CENTAR ZA BIOMEDICINSKA ISTRAŽIVANJA

### PHYSICO-CHEMICAL CHARACTERIZATION OF IGALO BAY PELOID (MONTENEGRO) AND ASSESSMENT OF THE POLLUTION OF POTENTIALLY TOXIC ELEMENTS IN THE SAMPLING AREA

Authors Miljan Bigovic, Milovan Roganovic, Ivana Milasevic, Dijana Djurovic, Vjerslava Slavic, Milica Kosovic, Mia Vlahovic, Svetlana Perovic, Andrej Perovic, Vlatko Kastratovic, Zorica Potpara, Milica Martinovic, Snezana Pantovic

Publication date 2020/5/1

Journal FARMACIA

### Organic composition of Igalo bay peloid (Montenegro)

Authors Miljan Bigovic, Snezana Pantovic, Ivana Milasevic, Ljubica Ivanovic, Dijana Djurovic, Vjerslava Slavic, Milica Popovic, Miroslav Vrvic, Milovan Roganovic

Publication date 2019/10/15

Journal Indian Journal of Traditional Knowledge (IJTK)

DOI: 10.4066/BIOMEDICALRESEARCH.29-18-873 · Corpus ID: 56214276

## Heat shock protein 27 and glycogen phosphorylase isoenzyme BB as markers of myocardial stunning in male water polo players

S. Pantović, V. Slavić, M. Roganović · Published 2018 · Medicine · Biomedical Research-tokyo

Introduction: Sudden cardiac death has a tendency to increase among elite athletes. It has been reported that endurance exercise increased serum concentrations of cardiac biomarkers in elite athletes although it is unclear whether is clinically significant or is a part of the physiological response. Lately, the theory of myocardial stunning is attractive since there is no permanent cellular damage and is transient nature. This prompts us to evaluate the

## Centre of excellence for digitalisation in food safety - FoodHub

University Donja Gorica

1. Development and application of apheresis therapy as a preventive medicine offer;
  2. Full characterisation of healing sea mud from Igalo basin
  3. Full characterisation of selected autochthonous plants from ME for the purpose of nutritive therapy
- 2020-2022

Project: DIPOL

Digital transformation of Agriculture and Food Supply Chain in Montenegro  
University Donja Gorica  
2018-2020

CENTAR IZVRSNOSTI FOODHUB UNIVERZITETA DONJA GORICA OKUPIO 12 PARTNERA IZ ZEMLJE I INOSTRANSTVA



### The Use of Tesseract OCR Number Recognition for Food Tracking and Tracing

Publisher: IEEE

Cite This

PDF

Stevan Čakić ; Tomo Popović ; Stevan Šandi ; Srđan Krčo ; Anita Gazivoda All Authors

143 Full Text Views

Abstract

Document Sections

I. Introduction

Abstract:

One of the most important character recognition applications based on

### Optimal Irrigation as a tool of Precision Agriculture

Publisher: IEEE

Cite This

PDF

Vesna Maraš ; Tomo Popović ; Spasenija Gajinov ; Milena Mugoša ; Vladimir Popović ; Ana Savović ; Katarina Pavičević ; Vasilij... All Authors

109 Full Text Views

Abstract

Document Sections

Abstract:

The precision viticulture is unique in its emphasis on vineyard management according to local variation of agro biological conditions, and in its use of science and technology to accomplish this aim. To achieve a particular goal of improved yield and quality in vineyard management, it is essential to understand the

# Marine Biodiversity Conservation Centre

Institute for Marine Biology Kotor,  
University of Montenegro

60 years of research tradition

Aquarium Boka, opened in 2020  
Grants of the Norwegian and  
Montenegrin Governments

- New research and innovation opportunities
- Enriched tourist offer of Kotor Bay region



Centar za zaštitu  
biodiverziteteta mora  
**AKVARIJUM BOKA**



**Project: „Valorization of Montenegrin katuns through development of sustainable agriculture and tourism - KATUN”**  
 Biotechnical Faculty,  
 Historical Institute  
 2016-2018

**THE KATUNS -RURAL BUILDINGS AS A PERSPECTIVE OF SEASONAL MOUNTAIN SETTLEMENTS IN MONTENEGRO**

Conference Paper Feb 2016

Ivan Laković · Sanja Pekovic · Dina Statuto · Pietro Picuno

Rural buildings play a central role on the environmental characteristics of the extra-urban land. They accompanied in the centuries the development of agricultural activities of the man who...

[View](#)

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Source



using	Rural huts
using	Caves
using	Separate shelters for daily or seasonal stay
using	Simple building for daily or seasonal stay
ns of nt	Colonial type
ns of nt	Casini holiday
ns of	Little fortress





**Project: Montenegro on the political and cultural map of Europe – CLIO MAP**  
Historical Institute  
2019-2020



# Mapping cultural heritage: CLIO MAP, Montenegro

Olga Pelcer-Vujačić, Marko Krevs, Zerina Ćatović

A screenshot of the 'CLIO Baza kulturnih dobara' web application. The interface includes a sidebar with search filters for 'Naziv dobra - lokacije', 'Naziv dobra - područja', 'Vrijeme nastanka - jednostavni - lokacije', 'Vrijeme nastanka - detaljni - lokacije', 'Dobra zaštićena u datumskom periodu - lokacije', and 'Zaštićeno dobro - lokacije'. The main area displays a map of Montenegro with numerous cultural heritage sites marked by colored diamonds. Labels on the map include 'Herzegovina Canton 9', 'Federation of Bosnia and Herzegovina Canton 5', 'Dubrovnik-Neretva County', 'Nacionalni park Durmitor', 'Podgorica', and 'Shkoder'. The Adriatic Sea is visible at the bottom.



## Project: Genetical and genomic diversity of vine in Montenegro

13. Jul Plantaže

Od 2012

CRNA GORA KOLIJEVKA VINOGRADARSTVA NA BALKANU

### Vinska istorija zapisana u genima vranca i kratošije

Kako je istorija crnogorskog vinogradarstva zapisana u njenim sortama? Čiji je potomak naš vranac, kako je potvrđena njegova autohtonost, ko su njegovi roditelji? Zašto je kratošija najstarija crnogorska sorta koja ima brojne potomke u Crnoj Gori i koja se širila svijetom, i gaji pod imenom primitivo u Italiji, zinfandel u Kaliforniji, tribidrag ili crljenak kaštelanski u Hrvatskoj?

© 13922 pregleda f 425 reakcija 5 komentar(a)



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Article | [Open Access](#) | Published: 14 September 2020

### Population genetic analysis in old Montenegrin vineyards reveals ancient ways currently active to generate diversity in *Vitis vinifera*

Vesna Maraš, Javier Tello, Anita Gazivoda, Milena Mugoša, Mirko Perišić, Jovana Raičević, Nataša Štajner, Rafael Ocete, Vladan Božović, Tatjana Popović, Enrique García-Escudero, Miodrag Grbić, José Miguel Martínez-Zapater & Javier Ibáñez

*Scientific Reports* **10**, Article number: 15000 (2020) | [Cite this article](#)


**1955** Accesses | **6** Altmetric | [Metrics](#)

## PROJECTS:

- Effects of physical exercise on the inclusion of elderly in the society
- Effects of autophagia and physical exercise on body composition, BMI, stress, healthy behaviour, cognitive capacities and social inclusion of the elderly
- Montenegrin platform for innovations in sports

Faculty of Sports, UCG  
2018-2021

Google Scholar



**Stevo Popovic** [orcid.org/0000-0002-6633-3575] [FOLLOW](#)

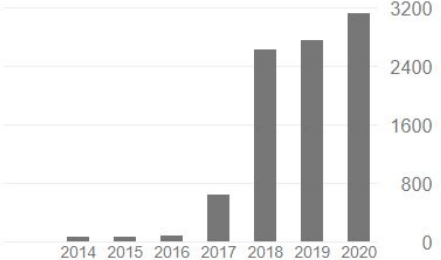
Associate Professor, Faculty for Sport and Physical Education, University of Montenegro  
Verified email at ucg.ac.me - [Homepage](#)  
Sport Science

[GET MY OWN PROFILE](#)

TITLE	CITED BY	YEAR
Worldwide trends in body-mass index, underweight, overweight, and obesity from 1975 to 2016: a pooled analysis of 2416 population-based measurement studies in 128·9 million ... L Abarca-Gómez, ZA Abdeen, ZA Hamid, NM Abu-Rmeileh, ... The Lancet 390 (10113), 2627-2642	2732	2017
Body height and its estimation utilising arm span measurements in Montenegrin adults D Bjelica, S Popović, M Kezunović, J Petković, G Jurak, P Grasgruber Anthropological Notebooks 18 (2), 69-83	212	2012
Rising rural body-mass index is the main driver of the global obesity epidemic in adults NCD-RisC Nature 569 (7755), 260–264	191	2019

Cited by

	All	Since 2015
Citations	9599	9428
h-index	51	50
i10-index	133	132



Year	Citations
2014	~100
2015	~100
2016	~100
2017	~400
2018	~2800
2019	~2800
2020	~3200

# Challenges in transforming S3 >> S4

- Activated EDP but still looking for a right method of participation (high interest for participation)
- Teamwork – institutional silos? >> S3 Council coordination
- Special challenge to create a **portfolio of development projects with sustainability embedded** >> EU funds, PPP, private investments + technical assistance
- Balance of bottom-up and top-down initiatives?
- Performing key institutions / emerging stakeholders?
- Continuous public communication – responsible research and innovation?

# Resources

- <https://s3platform.jrc.ec.europa.eu/s3-platform>
- [https://ec.europa.eu/info/horizon-europe/missions-horizon-europe\\_en](https://ec.europa.eu/info/horizon-europe/missions-horizon-europe_en)
- <https://rsaeeurope.org/event/2020-smarter-webinar3/>

Thank you!

Branka Žižić

National Coordinator for Smart Specialisation Strategy

Ministry of Economic Development

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