GOBLET & EMBnet AGM 2021

GOBLET 10th Anniversary

Bioinformatics Education & Training from 2012 and beyond

11-13 October 2021

Date: 11-13 October 2021
Time: 12:00-16:00 CEST every day

Zoom Connection: an invitation will be sent by Zoom immediately before the meeting

Note: The Zoom session will be open one hour before the meeting starts, so you are welcome to test your connection and have a chat before the meeting.

Time (CEST)	Topics
October 11, 2021 **12:00 – 16:00**	**Annual General Meeting - Day 1** Attendants: GOBLET members, EMBnet members & Observers Chair: Eija Korpelainen Link to the Collaborative Minutes document:
12:00 – 12:20	**Welcome** (*Domenica D'Elia & Celia van Gelder*)
	AGM Matters

12:20 – 12:40	GOBLET Executive Board Report 2020/2021 (*Celia van Gelder, Chair GOBLET, DTL/ELIXIR-NL, the Netherlands*)
12:40 – 13:00	EMBnet Executive Board Report 2020/2021 (*Domenica D'Elia, Chair EMBnet, Secretary GOBLET, CNR-ITB, Italy*)
	Highlighted activities from the global training community
13:00 – 13:20	Bioinformatics Education Summit 2021: a brief report (*speaker tbc*)
13:20– 13:40	ELIXIR-IT Training Platform: striving and collaborating to support the Life Sciences community of learners (*Allegra Via, CNR Institute of Biology and Molecular Pathology (IBPM), Roma (IT), and Coordinator of the ELIXIR Italian Platform*)
13:40 - 14:00	How to make data related to SARS-CoV-2 usable in the classroom: a new practical guide ([Using bioinformatics to hunt SARS-CoV-2, its variants & its origins](#)) (*Marie-Claude Blatter, SIB*)
14:00 - 14:30	**Break**
14:30 - 15:15	Introducing the Mastery Rubric for Bioinformatics - Applications to training & professional development (*Jessica Lindvall, Training coordinator NBIS/ELIXIR-SE*)
15:15 – 15:45	**Keynote Lecture by Prof. Erik Bongcam-Rudloff -** *Professor at the Swedish University for Agricultural Sciences, Uppsala Sweden, former President of EMBnet* **Do androids dream of electric sheep? An EMBnet view on Bioinformatics education**
15:45- 16:00	Wrap up - Closing of Day 1

October 12, 2021 **12:00 – 16:00**	**Annual General Meeting - Day 2** Attendants: GOBLET members, EMBnet members & Observers Chair:Celia van Gelder Link to the Collaborative Minutes document:
12:00 – 12:10	**Welcome and recap** (*Celia van Gelder*)
12:10 – 12:45	**GOBLET 10th Anniversary Celebration** **Keynote Lecture by Teresa K. Attwood –** Professor Emeritus of the University of Manchester and immediate past President of GOBLET **GOBLET 2012-2021 - Establishing the global bioinformatics training community**
	Flash Talks - Activity presentation by members and observers
Session 1	**Training in Bioinformatics & beyond** Chair: tbc
12:45 – 12:55	Australian BioCommons: delivering national collaborative bioinformatics training (*Christina Hall, PhD, Training and Communications Manager, Australian BioCommons, Melbourne Bioinformatics, University of Melbourne*)
12:55 – 13:05	Making Training Materials FAIR - update of ongoing work (*Melissa Burke, Australian BioCommons*)
13:05 - 13:15	eLearning course for single-cell RNA-seq data analysis (*Eija Korpelainen, CSC*)
13:15 - 13:30	**Break**

13:30 - 13:40	Teaching Bioinformatics in Italian Universities: a survey and suggestions for future guidelines (*Anna Marabotti, Italian Bioinformatics Society, University of Naples, IT*)
13:40 - 13:50	The Erasmus Programme for Belgian bioinformatics bachelors candidates at the University College of Mons (*David Coornaert, University College, Campus Technique, Mons, BE*)
13:50 - 14:00	Representation of the ISCB Education COSI at ISMB/ECCB 2021 (*Patricia Palagi, SIB*)
14:00 - 14:10	ISCB Academy tutorial series (*Batool Almarzouq, University of Liverpool, Institute of Integrative Biology, UK*)
14:10 - 14:20	ML4Microbiome - Training in microbiome analysis (*Leo Lahti, University of Turku, Finland*)
14:20 - 14:30	Bioinformatics online course materials by EMBnet E&T (*Erik Bongcam-Rudloff, Professor at the Swedish University for Agricultural Sciences, Uppsala, Sweden*)
14:30 - 14:45	**Break**
Session 2	**Hot Topics in Bioinformatics** Chair: tbc
14:45 - 14:55	A quick tour on DNA methylation in bacteria (*Laurent Falquet, University of Fribourg, Switzerland*)
14:55 - 15:05	Decoding the Human Genome and Autoimmune Diseases through a state of the art pipeline in Clinical Genomics and Bioinformatics (*Louis Papageorgiou - University of Athens*)

15:05 - 15:15	Genomic Surveillance of SARS-CoV-2 in the State of Rio de Janeiro, Brazil (*Ana Tereza R. de Vasconcelos, Department of Bioinformatics, Rio de Janeiro, Brazil*)
15:15 - 15:25	Easy access to a microbiome data analysis toolset (*Jesse Harrison, CSC*)
15:25 - 15:35	The EMBnet Journal (*Dimitrios P Vlachakis, Agricultural University of Athens, Greece)*
15:35 - 16:00	**Wrap up - Closing of Day 2**

Zoom Connection: an invitation will be sent by Zoom immediately before the meeting to registered people

Time	Topics
October 13, 2021 **12:00 – 16:00**	**GOBLET Annual General Meeting - Day 3** Attendants: GOBLET members only Chair: tbc
12:00 – 12:05	**Welcome & Recap (Celia van Gelder)**
12:05 - 12:10	Roll call of members *(Domenica D'Elia)*
12:10 – 12:25	Approval of Minutes of AGM 2020
12:25 – 12:40	Financial report 2020/2021 (Eija Korpelainen)
12:40 - 12:55	Financial support for GOBLET day-by-day activities (Celia van Gelder)
12:55 – 13:10	GOBLET AGM 2022: proposals
13:10	**GOBLET Activities - Updates & Next step**

13:10 – 14.00	**GOBLET Website: Update & Discussion** (Annette McGrath & Celia van Gelder) ● GOBLET Website: update and next Steps ● Trainer Resources pages
14:00 - 14:30	**Break**
14:30 - 15:00	Public Relations & Outreach (Asif Khan) ● Report about PR & Outreach Activities ● Next steps and how can GOBLET members get involved
15:00 - 15:30	GOBLET E&T (Javier de las Rivas)/Collaborations with other organisations / LET
15:30 – 15:45	Funding possibility for training-related projects (Celia van Gelder/Eija Korpelainen)
15:45 - 16:00	Parking Lot/AOB/ Wrap up and Closing

Zoom Connection: an invitation will be sent by Zoom immediately before the meeting to registered people

Time	Topics
October 13, 2021 15:00 – 18:00	**EMBnet Business Meeting - Day 3** Attendants: EMBnet members only Chair: Lubos Klucar
15:00 - 15:05	**Welcome and Programme Overview (Domenica D'Elia)**
15:05 - 15:15	Roll call of members *(Lubos Klucar)*
15:15 - 15:20	Approval of Minutes of AGM 2020
15:20 - 15:30	Financial report 2020/2021 (Emiliano Barreto)
15:30 - 15:45	E&T PC - Activity Report and Plans for the future (Erik Bongcam-Rudloff)
15:45 - 16:00	P&PR PC - Activity Report and plans for the future (Aspasia Efthimiadou)
16:00 - 16:15	**Break**
16:15 - 16.30	TM PC - Activity report - The EMBnet website (Eleni Papakonstantinou & Cesar Bonavides)
16:30 - 16:45	EMBnet.journal: plans for the future (Dimitris Vlachakis)
16:45 - 17:00	EMBnet AGM 2022: proposals and budget plan
17:50 - 17:00	Financial plans
17:00 - 17:10	Election of EB members (3 vacancies)
17:10 - 17:15	Election of the election committee

17:15 - 17:20	● Matters arising & amendments to agenda ● Approval of issues itemised in the agenda
17:20 - 17:30	Election/Voting (3 members for the EB)
17:30 – 17:40	Approval of Date & Location of EMBnet AGM 2022
17:40 - 16:00	**Concluding Remarks & Meeting Closure**

GOBLET & EMBnet AGM 2021

Associated Events

14 & 15 October 2021

ML4Microbiome Symposium

Grand Challenges of Data-Intensive Science

in Microbiome & Metagenome Data Analysis and Training

14 October 2021

Programme   12.00 – 16.00 CEST

Zoom Connection: an invitation will be sent by Zoom immediately before the meeting to registered people

Meeting ID:

Passcode:

ML4Microbiome web page here

Time	Topic
12:00-12:05	**Welcome**
12:05-12:15	**The ML4Microbiome COST Action: aims & a state-of-the-art report** *Domenica D'Elia*, ML4-WG 4 Leader, CNR-ITB, Italy

12:15-12:45	**Open data science in microbiome research** *Leo Lahti - ML4-WG 2 Leader - University of Turku, Finland*
12:45-13:00	**Break**
13:00-13:30	**The ELIXIR Machine Learning Focus Group: achievements and road ahead** *Fotis Psomopoulos – ELIXIR ML Focus Group Chair - Institute of Applied Biosciences (INAB), Centre for Research and Technology Hellas (CERTH), Thessaloniki, Greece"*
13:30-14:00	**Lessons learnt in Benchmarking in the context of OpenEBench/ELIXIR Communities** *Salvador Capella - ELIXIR ML Focus Group & ELIXIR Tools Platform Executive Committee (ExCo), Spanish National Bioinformatics Institute (INB) Coordination Node, Barcelona, Spain*
14:00-14:15	**The ELIXIR CNR.BiOmics platform: an Italian infrastructure for BIG DATA production, analysis and training** *Graziano Pesole,* *University of Bari and CNR-IBIOM, Italy, ELIXIR Italian Node Coordinator*
14:15-14:30	**Break**
14:30-15:00	**Machine Learning & Microbiome for Precision Nutrition** *Enrique Carrillo – ML4 member - Head Computational Biology Group, Precision Nutrition and Cancer Research Program,IMDEA Food Institute, Madrid, Spain*

15:00-15:30	**ML4microbiome for the advance of precision medicine: what Biomedicine expects from us** **Isabel Moreno** – *ML4 member – Hospital Clínico Virgen de la Victoria,* CIBER Fisiopatología de la Obesidad y Nutrición (CIBEROBN), *Málaga*, Spain
15:30-16:00	**Microbiome analysis in precision agriculture** **Eleni Papakonstantinou**, *National and Kapodistrian University of Athens, Greece*
16:00-16:15	Concluding Remarks

ML4Microbiome Workshop

Statistical and Machine Learning Techniques

for Microbiome Data Analysis

15 October 2021, 12.00-16.00 CEST

Programme   12.00 – 16.00 CEST

Zoom Connection: an invitation will be sent by Zoom immediately before the meeting to registered people

Meeting ID:

Passcode:

ML4Microbiome web page [here](#)

The bacteria living in and on us, over 100 trillion, are essential for human development, immunity and nutrition. Worldwide research initiatives are focused on human microbiome mapping, increasing the accessibility to large microbiome datasets. As a result, statistical and machine learning techniques to solve microbiome data analysis problems are in high demand. This workshop aims to introduce the audience to the main concepts of study design and statistical/machine learning techniques used in human microbiome studies. This event also fosters connections between

discovery-oriented microbiome researchers and statistical\machine learning experts inside and outside the ML4Microbiome COST Action.

Programme

12:00 – 12:15   **Welcome** - **Domenica D'Elia**, CNR Institute for Biomedical

Technologies, Bari, Italy

12:15 – 13:30   **Overview of the microbiome data**

Dr Ilze Elbere, Latvian Biomedical Research and Study Centre, Latvia

13:30 – 14:45   **Statistical analysis of the microbiome data with R**

Dr Eliana Ibrahimi, Department of Biology, University of Tirana, Albania

14:45 – 16:00   **How Artificial Intelligence is enhancing the human microbiome research**

Dr Magali Berland, MetaGenoPolis, French National Institute for

Agriculture, Food, and Environment, France

Lectures will introduce the audience to the main concepts of each topic. At the end of each Lecture, there will be a space of 15 minutes for Q&A and discussion followed by practical examples consisting of the application of statistical and machine learning methods on selected datasets.

First ELIXIR Hackathon on "Developing (FAIR) training materials for a lesson on how to develop (FAIR) training materials

Allegra Via & Patricia Palagi

15 October 2021, 12.00-16.00 CEST

Programme   12.00 – 16.00 CEST

Zoom Connection: an invitation will be sent by Zoom immediately before the meeting to registered people

This hackathon is organised in the context of the ELIXIR-GOBLET partnership and the ELIXIR Train-the-Trainer project. It aims at developing a lesson and related materials on how to develop FAIR training materials.
Objectives:

- Equip participants with general practices for training materials design and delivery
- Review the "Ten rules for making training materials FAIR"
- Identify teaching objectives and learning outcomes for the lesson

- Put together a scaffold of the lesson and associated materials

At the European BioHackathon in November, we will finalise the lesson by developing the actual content, including practical activities and exercises, and assessments.

Programme

12:00 - 12: 05	Welcome and introduction
12:05 - 12:15	Introduce to the 10 SR for making training materials FAIR, and link to the revision
12:15 - 12:25	Summary of the challenges, solutions, recommendations from the WEB (Workshop on Education for Bioinformatics)
12:25 - 12:35	Instructions on how we will work together
12:35 - 12:45	Presentation on how to write Learning Outcomes
12:45 - 13:30	Working in groups
13:30 - 14:00	Feedback and discussion in the main room with challenges, issues, pain points
14:00 - 14:20	Coffee break
14:20 - 15:00	Continue working in groups
15:00 - 15:50	Each group presents the current status - group rapporteurs
15:50 - 16:00	Next steps - Biohackathon in November 2021

Organising online bioinformatics courses using
EMBnet Education & Training material: 4 level courses

EMBnet Education & Training Project Committee

15 October 2021, 12.00-16.00 CEST

Programme   12.00 – 16.00 CEST

Zoom Connection: an invitation will be sent by Zoom immediately before the meeting to registered people

The COVID-19 pandemic has led to a move from classroom-based education to online education. Many teachers had to adapt their existing course lectures and tutorials to online materials, many times without dedicated help from pedagogical experts.

During this EMBnet workshop, we will present some examples of courses in Bioinformatics given under different conditions in different parts of the world.
We will together discuss issues encountered when organising and performing online teaching and we will share experiences and solutions.

The goal of this workshop is to empower the participants with the necessary knowledge and resources to be able to organise an online introductory course of one week or a longer one-month advanced course.

We will use Moodle as a tool and learn how to use some of the modules created by members of the EMBnet's "Online Educational" Task Force.

Programme

12:00 - 12: 10	Introduction to the Workshop
12:15 - 13:00	Presentations from different experiences from giving courses online (2X15minutes with questions)
13:00 - 13:30	Panel Discussion with people that participated on online courses during the Pandemics
13:45 - 14:30	Moodle Introduction (Lecture)
14:30 - 15:00	Presentation of representatives course created by the Task Force (Short lectures/demo)
15:00 - 15:50	Practical time

Participants will be divided in smaller groups and will work on using the Bioinformatics materials in the Moodle server maintained by the project.

15:50-16:00	Wrap up and Home message