



GeneHumDi Training Course

Granada, 16–17 March



Funded by
the European Union



Training School: CRISPR–Cas9 guide RNA Design
Tools and Safety Assessment of Genome Editing
(GenE–HumDi)
16–17 March 2023
Granada

8:00

Registration desk open
GENyO, entrance hall.

9:00

9:00

Welcome address and course introduction.
Ayal Hendel

9:30

9:30

Lecture: Mutation discoveries, clinical and technical challenges.
Giandomenico Turchiano

10:00

10:00

Short networking coffee break
Sponsored by GeneHumdi

10:30

10:30

Hands-on CRISPRon/off
Jan Gorodkin

12:00

12:00

Practical Case:

- 1) Generation of TCR-KO HLA-I-KO CART cells.
- 2) Efficacy and specificity evaluation.
- 3) FACS analyses

Kristina Pavlovic

13:00

13:00

Lunch break
Held outside GENyO facilities

14:00

14:00

Hands-on CRISPRoots (Part II)
Stefan Seemann

15:30

15:30

Lecture:
Off-target-CRISPECTOR
Ayal Hendel

16:00

16:00

Quantifying on- and off-target genome editing
(Part I: theoretical)
Nechama Kalter

16:30

16:30

Short networking coffee break
Sponsored by GeneHumdi

17:00

17:00

Quantifying on- and off-target genome editing
(Part II: practical)
Nechama Kalter

18:00

18:00

Wrap-up and final messages

18:30

8:00

Registration desk open

GENyO, entrance hall.

9:00

9:00

Hands-on:

1. Define editing strategy according to genetic needs.
2. Design gRNA/In-silico test for off-target analysis.

11:00

Giandomenico Turchiano

11:00

Short networking coffee break

Sponsored by GeneHumdi

11:30

11:30

Town Meeting:

Gene Editing design/genotoxicity evaluation:

What resources are available for EU researchers?

How to help harmonizing analysis pipelines?

12:00

12:00

Visit GENyO Facilities

13:00

13:00

Wrap up and photo op!

14:00

Closing Remarks!

14:00

15:00



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: [@genehumdi](#)



: [@genehumdi](#)



: [@qoto@genehumdi](#) and join our group pages in



[Facebook](#)

and



[LinkedIn](#)

COURSE SUGESTED READINGS:

[2018_AlkanF--GorodkinJ_GenomeBiol.pdf](#)

[2018_AlkanF--GorodkinJ_GenomeBiol_sup1.pdf](#)

[2021_AmitI--HendelA-YakhiniZ_NatCommun_CRISPECTOR.pdf](#)

[2021_AmitI--HendelA-YakhiniZ_NatCommun_CRISPECTOR_supp1.pdf](#)

[2021_XianX--LuoY_NatCommun.pdf](#)

[2022_AnthonC-CorsiGU-GorodkinJ_Bioinformatics_CRISPRon-off.pdf](#)

[2022_CorsiGI--SeemannSE_NAR_CRISPRroots.pdf](#)

[2022_CorsiGI--SeemannSE_NAR_CRISPRroots_supplemental_files.zip](#)

Local Organizing Committee (LoC) / Scientific Committee (SciC)

Granada 16-17 March

- Ayal Hendel (SciC)
- Karim Benabdel lah (SciC, LoC)
- F. Javier Molina Estévez (SciC, LoC)
- Giandomenico Turchiano (SciC)



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1st (GenE-HumDi) COST Action Training School: “CRISPR-Cas9 guide RNA design Tools and Safety Assessment of Genome editing”

Topics:

1. Design gRNA (CRISPRon/off)/In-silico test for off-target analysis
2. Quantifying on- and off-target genome editing (CRISPECTOR)
3. CRISPRroots: RNA-seq data assessed for on-target and off-target sites.

March 16-17, 2023
Granada,
Spain



Dr. Ayal Hendel
Bar-Ilan University,
Ramat-Gan, Israel



Dr. Jan Gorodkin
University of Copenhagen,
Frederiksberg
Denmark.



Dr. Giandomenico Turchiano
University College London,
London, United Kingdom.



Dr. Stefan Seemann
University of Copenhagen,
Frederiksberg
Denmark.



Nechma Kalter
Bar-Ilan University,
Israel



Kristina Pavlovic
GENYO
Fundacion Progreso y salud
Spain



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