

BIOTOP HEIDELBERG: DO-IT-YOURSELF BIOLOGY TO PROMOTE CITIZEN SCIENCE

COSENZA M. R. – CLINICAL COOPERATION UNIT MOLECULAR HEMATOLOGY/ONCOLOGY, GERMAN CANCER RESEARCH CENTER, HEIDELBERG

ABSTRACT

Do-It-Yourself Biology (DIYbio) is a global movement that brings biology outside the academic or industrial labs and to the lay public.

The DIYbio community is a heterogeneous group of citizen scientists including enthusiasts, amateurs, designers, artists, entrepreneurs, students and trained scientists.

DIYers are often organized in shared spaces known as "community labs", carrying common projects focused on education, personal exploration, discovery but also technology, entrepreneurship, health and art.

The ultimate scope of DIYbio is to promote democratization of science through access to biotechnology and learn-by-doing education.

Community labs often foster alternative and creative solutions thanks to their creative and stimulating environment and the unique background of each DIYers. Indeed, DIYbio has already contributed to public awareness and education, and has produced significant technical and scientific achievements, as well as new business ideas.

The most famous DIYbio labs are born in eclectic, international cities with a flourishing student community such as San Diego, New York, Paris, London.

In Germany, with few exceptions the scene is still quiet: there are many DIYers working alone and only one group in Berlin called "Biotinkering", which is in the process of building its own community lab.

Thanks to the large number of international students and research institutes, Heidelberg is a place where biology and society constantly interact, with potential DIYbio enthusiasts arriving every year. It is the perfect city where a DIYbio community lab could thrive and act as a bridge between the residents, industry and academia.

However, such a lab would first need enthusiast, motivated DIYers.

If you also believe in democratization of science, do-it-together and love biology...

Join the community! Colonize the Biotop!

WHAT IS DIYBIO?



<https://diybio.org/>

DO-IT-YOURSELF BIOLOGY (DIYBIO) IS A GLOBAL MOVEMENT THAT BRINGS BIOLOGY OUTSIDE THE ACADEMIC OR INDUSTRIAL LABS AND TO THE LAY PUBLIC.

WHO IS A DIYBIOLOGIST?

CITIZEN SCIENTISTS

ENTHUSIASTS

ARTISTS

STUDENTS

AMATEURS

ENTREPRENEURS

TRAINED SCIENTISTS

DESIGNERS

WHAT IS THE SCOPE OF DIYBIO?

THE SCOPE OF DIYBIO IS TO PROMOTE DEMOCRATIZATION OF SCIENCE THROUGH ACCESS TO BIOTECHNOLOGY AND LEARN-BY-DOING EDUCATION.

WHAT ARE DIYBIO CORE VALUES?

GRASSROOT

OPEN ACCESS

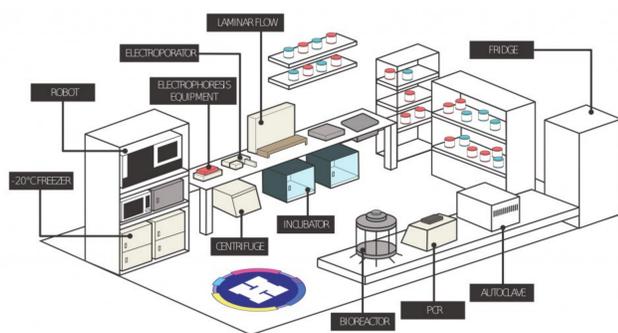
LEARN-BY-DOING

COMMUNITY

TINKERING

WHAT IS A COMMUNITY LABORATORY?

COMMON SPACE
SHARED EQUIPMENT
SAFE ENVIRONMENT



WHAT CAN I DO IN A COMMUNITY LAB?

HANDS-ON WORKSHOPS

BIOLOGY PROJECT

BIO-ART

EDUCATION

BIOECONOMY STARTUP

NETWORKING

CITIZEN SCIENCE

BIOETHICS

GAMES & FUN!

WHAT TYPES OF PROJECTS DO YOU CARRY ON?

DIYBIO PROJECTS FOCUS ON EDUCATION, PERSONAL EXPLORATION, DISCOVERY BUT ALSO TECHNOLOGY, ENTREPRENEURSHIP, HEALTH AND ART.

BUILD HARDWARE

PROOF-OF-PRINCIPLE

MICROBIOLOGY

GENETICS

ZOOLOGY & BOTANICS

SYNTHETIC BIOLOGY

WHY ARE PEOPLE DOING DIYBIO?

CURIOSITY ABOUT BIOLOGY

PERSONAL DISCOVERY

WORK ON YOUR OWN IDEA

TEST A STARTUP CONCEPT

PROMOTE CITIZEN SCIENCE

ENGAGE SOCIETY WITH YOUR RESEARCH

COME ON, DIYBIO CANNOT HAVE A REAL IMPACT...



PLANTS



FOOD



MATERIALS



Synbiota
EDUCATION



HEALTH



TECHNOLOGY



SCIENCE ACCESS

ARE YOU SURE DIYBIO PEOPLE KNOW WHAT THEY'RE DOING?

DIYBIO CODE OF ETHICS FROM EUROPEAN CONGRESS

TRANSPARENCY

SAFETY

OPEN ACCESS

EDUCATION

MODESTY

COMMUNITY

PEACEFUL PURPOSE

RESPECT

RESPONSIBILITY

ACCOUNTABILITY

HOW CAN I HELP?

DONATE MATERIAL!

TALK ABOUT US!

PARTNER UP!



GREAT! HOW CAN I JOIN?

HELP US TO BUILD A DIYBIO COMMUNITY IN HEIDELBERG!
JOIN THE DISCUSSION ON BIOTOP HEIDELBERG GOOGLE GROUP

<https://groups.google.com/d/forum/biotop-hd>
biotophd@gmail.com @BiotopHD

IF YOU WERE PART OF THE DIYBIO COMMUNITY, WHAT WOULD YOU DO?