



SynthEthics

Official Brochure



SynthEthics

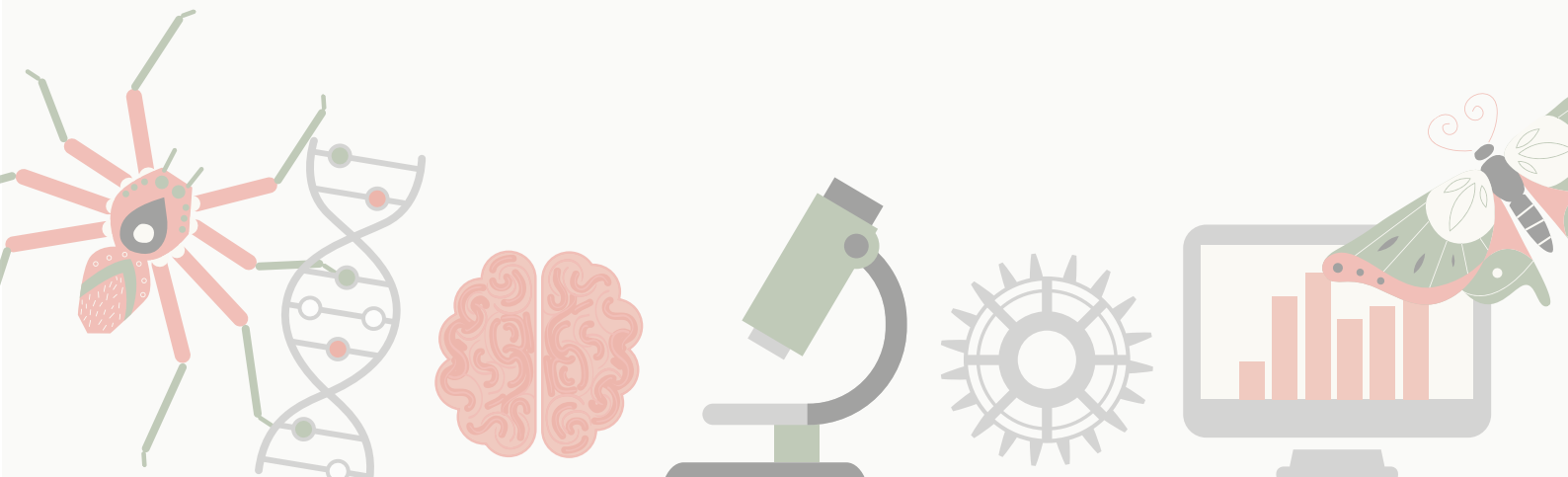
WE INVESTIGATE THE PATH TOWARDS A PROSPEROUS FUTURE
IN A WORLD OF BIOTECHNOLOGY

Our Mission

SynthEthics is an international initiative where ethical questions regarding biology and genetic engineering are posed in an effort to discover potential risks and problems we might face in the light of new-era biotechnology and medicine.

These are fields that show great promise for a prosperous future, but also areas of research that expose us to severe risks and detrimental outcomes.

The consequences of biology will affect us all. Therefore, we are avid to gather the opinions of people from all professions, cultures and ideologies.



Creating a global platform for discussion about ethics in biotechnology



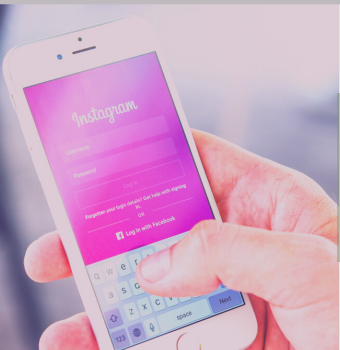
Making sure research and innovation go in the right direction



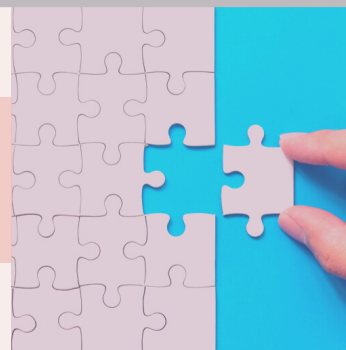
Increasing the knowledge and wisdom in bioethics so that more innovations become reality



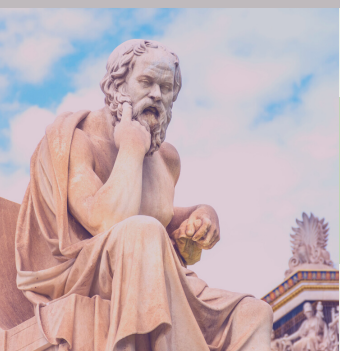
Increasing the public's awareness of bioethical issues and biotechnological progress



Collaborating with researchers to help them with their ethics



Conducting own research in the field of philosophy

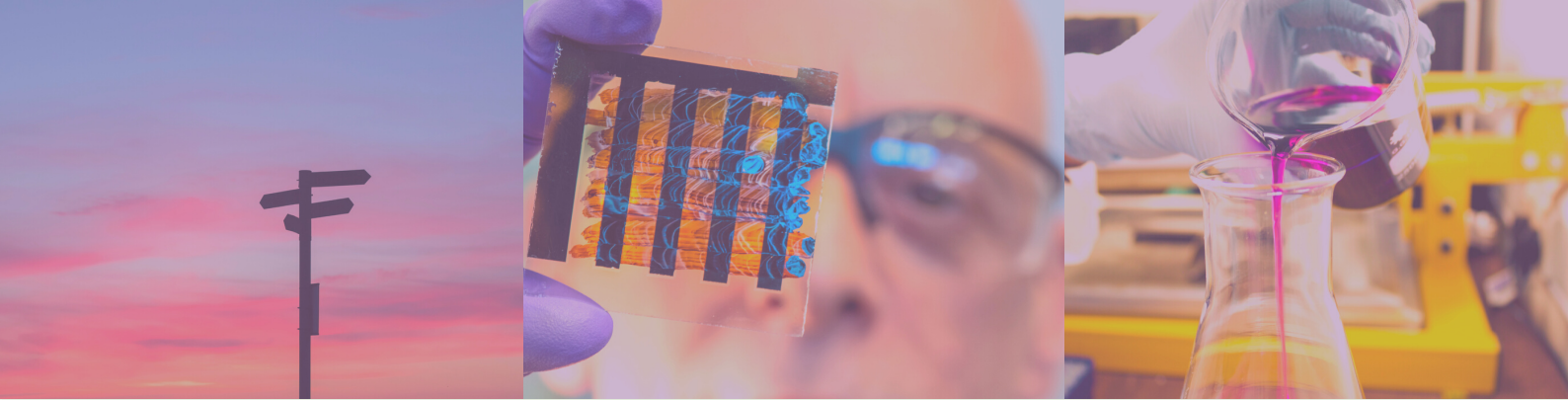




SynthEthics

The Website

The future possibilities and risks of synthetic biology
at your fingertips



Mission



Blog



iGEM Survey



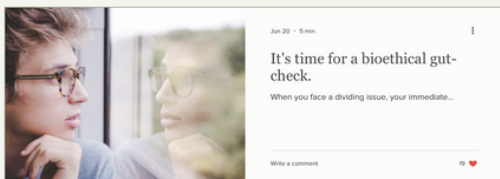
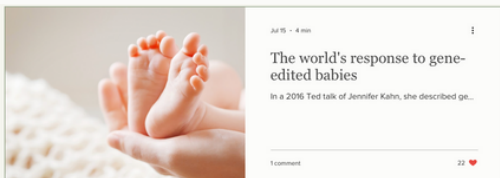
Selection



Team



Contact



Blog



We offer stimulating articles written by Team members, infusing hot-topics in the realms of synthetic biology and cutting-edge technologies with careful ethical considerations.



SynthEthics

The Website

The future possibilities and risks of synthetic biology
at your fingertips

Ethical Evaluation

The ethical implications of a biotechnological project might fall in the grey zone, thus not being able to move forward. Risk assessment, mitigation of social, environmental or biotechnological consequences, assessment of legal limitations is paramount in today's rapidly expanding world.

We wish for your iGEM project to pursue further development, and we are here to galvanize your process by providing a comprehensive, ethical evaluation of your work!

Once filling out the form, which helps us map the directions your research is taking, our team will get in touch with you!



iGEM Ethical Evaluation Form

iGEM team (Name and Year of Participation)

Email

Give a brief description of your project!

iGEM Survey



We provide risk assessment, mitigation of social, environmental or biotechnological consequences, assessment of legal limitations for iGEM projects.

Selection

We have collected an assembly of mind-provoking talks and articles for your inspiration and stimulation! If new thoughts sprung to your mind, we are more than thrilled to receive your takes on any of the topics!

Videos



Articles



Comments



How synthetic biology could wipe out humanity -- and how we can stop it | Rob Reid



The world-changing promise of synthetic biology and gene editing has a dark side. In this far-seeing talk, author and entrepreneur Rob Reid reviews the risks of a world where more and more people have access to the tools and tech needed to create a doomsday bug that could wipe out humanity -- and suggests that it's time to take this danger seriously.



Selection



We collected an assembly of mind-provoking talks and scientific articles for anyone's inspiration and stimulation.



SynthEthics

iGEM

The International Genetically
Engineered Machine Foundation



iGEM began as an independent study course at the MIT where students developed biological devices to make cells blink. The International Genetically Engineered Machine Foundation is dedicated to the advancement of synthetic biology. Every year nearly 6,000 people present their work and compete at the annual Jamboree in Boston.

With 40,000+ members, iGEM's international network of academics and industry professionals are building a better world. iGEM is also the largest synthetic biology innovation program and a launchpad for the industry's most successful leaders and companies. iGEM programs are supported by a panel of industry experts that guide iGEM and set the industry standard for how synthetic biology is performed.

(From: www.igem.org)

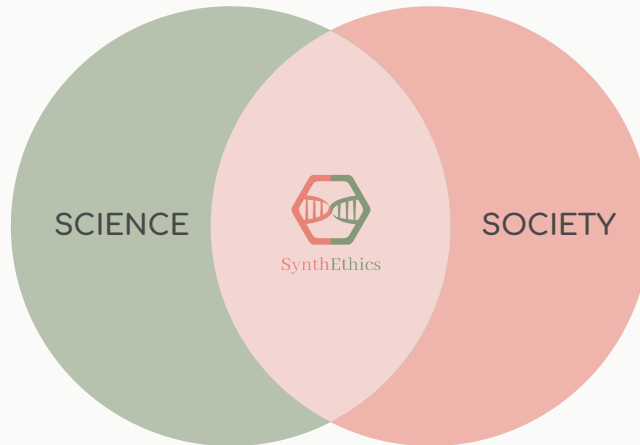
We are not affiliated with iGEM, but 2019 iGEM Team Lund, Stockholm and Wroclaw were highly involved in starting the initiative. SynthEthics is also building collaborations within the iGEM network and current teams, mainly by offering an ethical evaluation of current research projects.



SynthEthics

Social Media Presence

Providing mental nourishment and developing rich connections by offering authentic and relevant content



Rahil Samlal
Ambassador - South Africa
Medical Microbiology

Alice Cai
Ambassador - Arkansas, US
Bio-Inspired Nanomaterials,
Creative Writing, Journalism

Shaira Gozun
Ambassador - Philippines
Life Sciences, Materials Science

Do you think that there are qualities, which each baby should be given, so that in the long run, our society becomes better? If yes, what are they and why?

Would it be ethical to engineer endangered species for the purpose of preservation (by increasing its fitness)?

How much would you want the capabilities of your baby to be left unsettled, undetermined by genetic change?

If you knew that the overpopulation becomes a bigger and bigger problem, would you consider lowering your baby's desire to reproduce?

Is it right to use living organisms like factories, and to engineer their genome to produce things humans want?

Everyone should know as much as possible about the risks and potential benefits of gene-editing human embryos before such research can proceed. Decisions and actions should be made with accompanying caution and responsibility.

"Scientific and technological progress might change people's capabilities or incentives in ways that would destabilize civilization"

To react is automatic, instant and uncontrollable; to respond, on the other hand, is well-thought-out, collected and composed.

- Interactive Polls, Q and As, Scales
- Ethical Questionnaires feat Reaction Emojis
- Highlighted quotes from Articles
- Selection page features
- Team Member Introduction posts



SynthEthics

The Team

Young researchers, accomplished youth leaders
from different parts of the world united to
bring prosperity to a world of biotechnology.



Erik Hartman

Biomedical Engineering and Biomedicine

Founder - Sweden



Blanka Novák

Microbiology, Pharmacology and Analytical Chemistry

Founder - Hungary



Albert Anis

Biotechnology

Ambassador - Sweden



Rahil Samlal

Medical Microbiology

Ambassador - South Africa



Alice Cai

Bio-inspired nanomaterials, Creative Writing, Journalism

Ambassador - Arkansas, US



Lester Sabadao

Agricultural Sciences, Microbiology, Biotechnology

Ambassador - Philippines



Shaira Gozun

Life Sciences, Materials Science

Ambassador - Philippines



Neil David Cayanan

Medicine, Environmental Science, Acoustics

Representative - Philippines



Perisa Ashar

Cancer, Neuroscience, miRNAs, Nanotechnology, Genetic editing

Ambassador - Virginia, US



Jay Iyer

Microbiology, Chemical biology

Ambassador - Louisiana, US



Grigori Matein

Physics, Quantum Computation and algorithms

Ambassador - Bulgaria



Dana Venkert

Neurobiology, Biotechnology, Medicine, Immunology

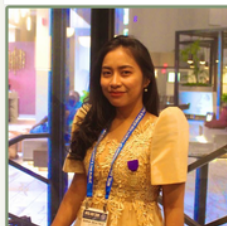
Ambassador - Israel



Maria Isabel Layson

Biomedical Science, Plant Science, Metabolomics, Chemistry

Representative - Philippines



Anna Beatriz Suavengco

Microbiology, Plant Pathology and Biotechnology

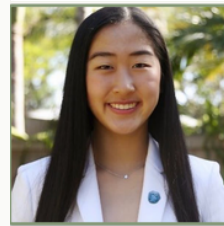
Representative - Philippines



Merve Değerlier

Computer Science, Biotechnology, Engineering

Ambassador - Turkey



Emily Tianshi

Environmental Science and Engineering

Ambassador - California, US



Kyler Tavendale

Medical Sciences

Representative - South Africa, Johannesburg



Kinjaal Nagindas

Microbiology, Food Sciences

Representative - South Africa, Pretoria

REPRESENTED COUNTRIES AND STATES

- Sweden
- Hungary
- Turkey
- Israel
- Bulgaria
- Philippines
- Mexico
- South Africa
- Virginia, US
- California, US
- Arkansas, US
- Louisiana, US

19 members and
continuously
growing



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The Team

Young researchers, accomplished youth leaders
from different parts of the world united to
bring prosperity to a world of biotechnology.

ABOUT THE FOUNDERS



Erik Hartman

Biomedical Engineering
and Biomedicine

Erik is one of the founders of SynthEthics, student of biomedicine and biomedical engineering at Lunds University, Sweden, who has been doing projects in translational medicine, synthetic biology, bioinformatics and most recently ethics. He was awarded the most prestigious award at the Sweden National Science Competition for Youth, 3rd award at Intel ISEF in 2018 and a gold medal at iGEM 2019. His most recent adventure is into the world of bioethics and genetic engineering. He's hopeful, although worried, about what the future may bring.



Blanka Novák

Microbiology, Pharmacology and
Analytical Chemistry

Blanka is one of the founders, organiser of the Global Ambassadors group via STEMPOOL at SynthEthics and host of the Drop the STEM podcast. Her passions encapsulate public outreach and scientific communication. She is a university student, scientific researcher in Microbiology. Her project was awarded First Prize at the Hungarian Innovation Youth Talent Contest, Bioeconomy Prize at EUCYS, 4th place at Intel ISEF 2019 and represented Hungary at the Stockholm International Youth Science Seminar, attending the Nobel festivities. She believes that a lot of times, inactivity is not due to a lack of interest but information. Therefore, to her making the advancements of the STEM fields, the possibilities of synthetic biology known and understandable to others is paramount: turning walls into doors.

Get to know the research works, accomplishments,
outreach areas and personal aspirations of SE
Ambassadors and Representatives via:

www.synthethics-bio.com/team

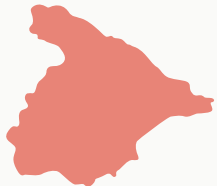


SynthEthics

Ambassadors

Young researchers, accomplished youth leaders
from different parts of the world united to
bring prosperity to a world of biotechnology.

AMBASSADORS LAYOUT



National / State Ambassador



Regional / County Representative



City / Town Representative



University / College Representative



Members

Each ambassador has their commission sphere, a circle of influence. The organizational design is composed of usually one ambassador. Under the wings and guidance of the national or state ambassador, we have several regional / county representatives, in each region a city representative, university representatives, and the members within that community. In a cohesive and logical setup, each succeeding level encapsulates the group assigned to that person, being responsible to motivate their proactivity and advocacy, while providing regular feedback to and maintaining effective teamwork.

HOW TO JOIN?

Contact: Blanka Novák

Co-founder of SynthEthics, Organiser of Global Ambassadors Group

Application form: <https://www.stempool.net/ambassadors>

powered by
STEMPOOL



SynthEthics

Ambassadors

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from different parts of the world united to
bring prosperity to a world of biotechnology.

PRIMARY AREAS OF ACTIONABLE INTEL



Strategic Advocacy

Championing the message and building awareness: promotion to friends, professors, university clubs, organizations, iGEM teams as the official face of SynthEthics in your home country / state.



Growing community

Signing up new members, representatives under your wings as ambassador, being responsible to motivate their proactivity and advocacy.



Content creation

Creating diverse, engaging social media content, intriguing articles, infographics, posts and questionnaires. 2 times / month of active engagement is required from your part.



Story- telling

Sharing information about the initiative and yourself - under the banner of getting to know us, having that personalized experience people can relate and connect to.



Culture of Innovation

Bringing innovation closer to others. Generating new questions in areas you think have not been covered. Ideas for out-of-the-box solutions are highly valued.



SynthEthics

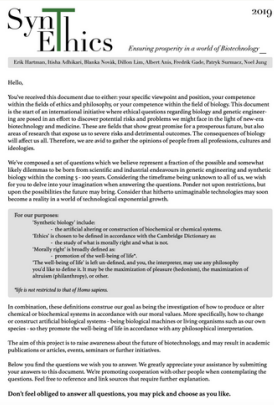
Outreach

Forging professional and public connections

For inquiries, reach out to us via our [Contact Form](#)

on the website: www.synthethics-bio.com

SENDOUTS



Official Form of Questionnaire



contact for access



Public Questionnaire via Social Media



Official Brochure on the Mission



PARTNERS



STEMPOOL is a platform transforming the way how professional connections are built as featured on Shark Tank and Forbes Hungary. www.stempool.net

On the global Drop the STEM podcast you can tune into impactful conversations with exceptional young minds: to inspire change and spread passion for science. www.dropthestem.com

Buzz Online is a US-based educational platform offering free intersectional project-based courses developed and taught by recognised youth. www.buzzonline.org

STEMag is an interdisciplinary publication featuring STEM-related writing, art, multimedia, and more. www.stemag.org