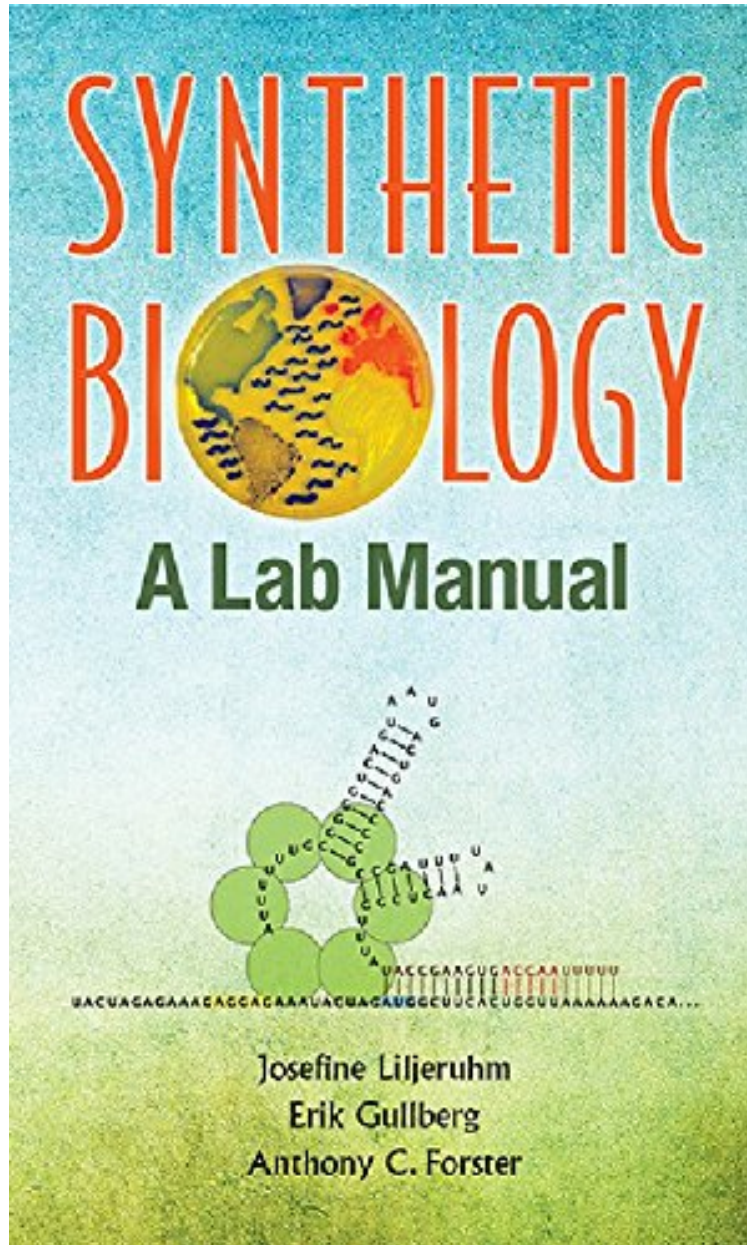


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Synthetic Biology : A Lab Manual

Josefine Liljeruhm, Erik Gullberg, Anthony C Forster
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Josefine Liljeruhm, Erik Gullberg, Anthony C Forster : Synthetic Biology : A Lab Manual before purchasing it in order to gage whether or not it would be worth my time, and all praised Synthetic Biology : A Lab Manual:

Synthetic Biology: A Lab Manual is the first manual for laboratory work in the new and rapidly expanding field of synthetic biology. Aimed at non-specialists, it details protocols central to synthetic biology in both education and research. In addition, it provides all the information that teachers and students from high schools and tertiary institutions need for a colorful lab course in bacterial synthetic biology using chromoproteins and designer antisense RNAs. As a bonus, practical material is provided for students of the annual international Genetically Engineered Machine (iGEM) competition. The manual is based upon a highly successful course at Sweden's Uppsala University and is coauthored by one of the pioneers of synthetic biology and two bioengineering postgraduate students. An inspiring foreword is written by another pioneer in the field, Harvard's George Church: "Synthetic biology is to early recombinant DNA as a genome is to a gene. Is there anything that SynBio will not impact? There was no doubt that the field of SynBio needed 'A Lab Manual' such as the one that you now hold in your hands." Readership: Students and researchers in biotechnology, cell/molecular biology and genetics.

From the Inside Flap
Synthetic Biology: A Lab Manual is the first manual for laboratory work in the new and rapidly expanding field of synthetic biology. Aimed at non-specialists, it details protocols central to synthetic biology in both education and research. In addition, it provides all the information that high school and tertiary institution teachers and students need for a colourful lab course in bacterial synthetic biology based on chromoproteins and designer antisense RNAs. As a bonus, practical information is provided for students of the annual international Genetically Engineered Machine (iGEM) competition. The number of student courses and iGEM teams in synthetic biology is growing rapidly but there is presently no book describing lab protocols or course designs. This manual complements existing synthetic biology theory textbooks. This will be the first manual of lab protocols in the emerging field of synthetic biology. It is also the first lab teaching course in the field, based upon a highly successful course at Uppsala University. The manual is coauthored by one of the pioneers of synthetic biology and two bioengineering postgraduate students.
About the Author
Josefine Liljeruhm (MSc in Molecular Biotechnology, Uppsala) is a PhD student in Prof. Anthony Forster's lab at the Department of Cell and Molecular Biology, Uppsala University, Sweden. She set up and taught the synthetic biology lab course detailed in this manual. Erik Gullberg (MSc in Engineering Biology, Linköping) is a PhD student in Prof. Dan Andersson's lab at the Department of Medical Biochemistry and Microbiology, Uppsala University, Sweden. He tutored the last three iGEM teams in synthetic biology at Uppsala University. Anthony C Forster (MD, Harvard; BSc Hons., PhD in Biochemistry, Adelaide) is a professor researching synthetic biology at the Department of Cell and Molecular Biology, Uppsala University, Sweden. He discovered the hammerhead catalytic RNA structure, authored patents that founded two biotech companies, edited synthetic biology volumes of *Methods and Biotechnology J.*, and created the synthetic biology lab course detailed in this manual.