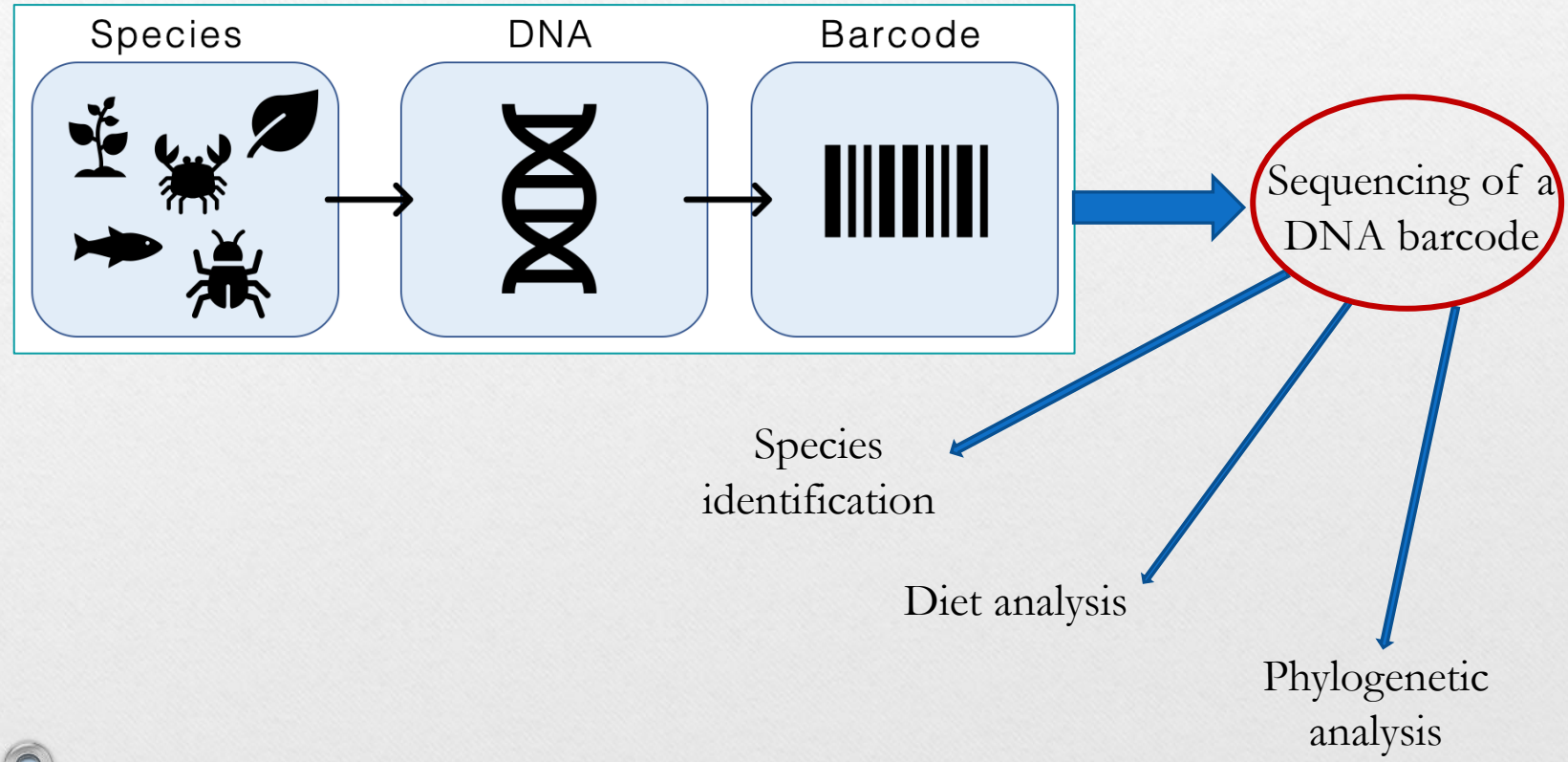
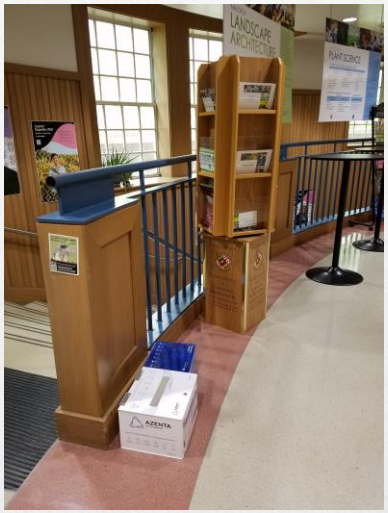

Sequence
Analysis

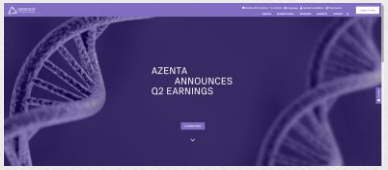
Sequencing



Images: https://en.wikipedia.org/wiki/DNA_barcoding

Sample preparation for sequencing



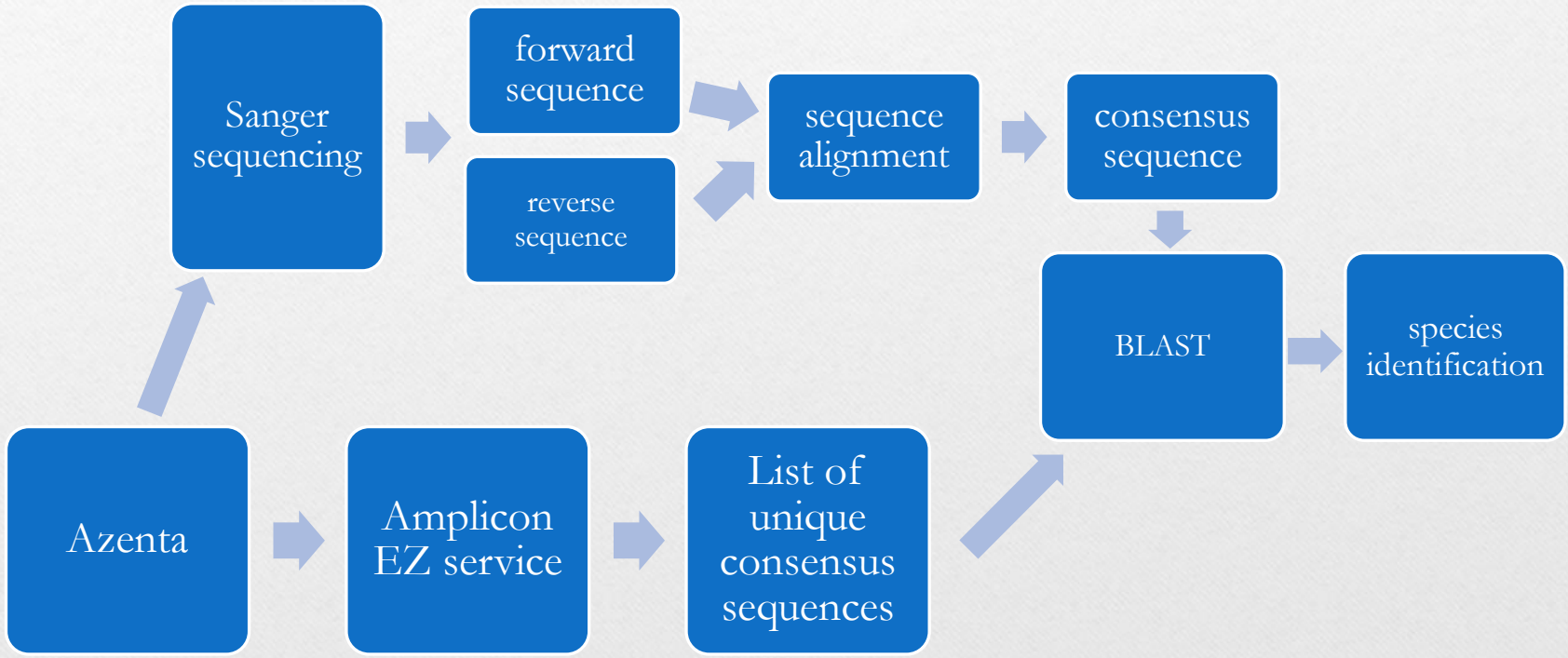


genewiz.com

- Follow guidelines for sample preparation
- Species identification: Sanger sequencing; results are ready on the next day
- Diet analysis: NGS (Amplicon EZ service); results are ready in 8 business days
- Results: files which contains sequence information (raw sequences)
- Next: sequence analysis (editing, aligning, BLAST, etc.)

Images: https://en.wikipedia.org/wiki/DNA_barcoding

Sequence Analysis for Species Identification: Roadmap



Basic sequence analysis: how do we do it?

- There are many tools for sequencing analysis
- Helpful guidelines are included for: BioEdit, 4Peaks, Unipro UGENE, BLAST, and downloading sequences from the NCBI GenBank database
- Got a high-quality sequence? Submit it to GenBank!

Congratulations! You have completed the DNA barcoding course!

- Thank you for taking our course!
- Hope you can apply your new skills in your research project!
- Check out the feedback from our current and past lab mates on their DNA barcoding experience
- And …keep learning!

Image and video credits

- Videos: recording and editing were done by Alina Avanesyan
- Photos: preparing and editing by Alina Avanesyan

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