



# Network Biology & Biomedicine

MED 283 / BNFO 286

**Spring Quarter 2023**

**Recorded lectures and slide decks**

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Lecture 1.1 Introduction: why biological networks? (Ideker)  
[Recording](#) | [Slides](#)

Lecture 1.2 Basics of Network Theory I (Ideker)  
No Recording | [Slides](#)

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Lecture 2.1 Protein Interaction Networks I (Ideker)  
[Recording](#) | [Slides](#)

Lecture 2.2 Genetic interaction networks I (Kelly)  
[Recording](#) | No Slides

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Lecture 3.1 Introduction to network analysis in Cytoscape and Python (Pillich / Churas)  
[Recording](#) | No Slides

Lecture 3.2 Genetic interaction networks II (Kelly)  
[Recording](#) | No Slides

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Lecture 4.1 Protein interaction networks II (Ideker)  
[Recording](#) | [Slides](#)

Lecture 4.2 Protein interaction networks III (Ideker)  
[Recording](#) | [Slides](#)

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Lecture 5.1 Network organization and modularity I (Ideker)  
[Recording](#) | [Slides](#)

Lecture 5.2 Network organization and modularity II (Ideker)  
[Recording](#) | [Slides](#)

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Lecture 6.1 Transcriptional and chromatin networks I (Benner)  
[Recording](#) | No Slides

Lecture 6.2 Transcription and chromatin networks II (Ideker)  
[Recording](#) | [Slides](#)

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Lecture 7.1 Midterm Examination

Lecture 7.2 Network theory and algorithms II (Ideker/Carlin)  
[Recording](#) | [Slides](#)

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Lecture 8.1 Network-based Genome-Wide Association Studies I (Palmer)  
[Recording](#) | [Slides](#)

Lecture 8.2 Network-based Genome-Wide Association Studies II (Ideker)  
[Recording](#) | [Slides](#)

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Lecture 9.1 Using networks for interpretable machine learning (Ideker / Pratt)  
[Recording](#) | [Slides](#)

Lecture 9.2 Network comparison and differential analysis (Ideker)  
[Recording](#) | [Slides](#)

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Week 10 Work on Team Projects

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Week 11 Team Project Presentations  
Final Project Reports Due

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