







RESULTS

448 Lecture Videos





Protein basics

Outline:

- Polymers of amino acids
- Order specified by bases in mRNA
- Fold spontaneously into catalytic structures, driven by hydrophobic effects and hydrogen bonds

Learning Objectives:

- Describe protein 1° and 2° structure
- Relate to gene structure



2

```
ages.c (-src3m) - gedit
// declare array an array to store everyone's age
27 int ages[n];
28
29 // get everyone's age
30 for (int i = 0; i < n; i++)
31 {
32     printf("Age of person #i: ", i + 1);
33     ages[i] = GetInt();
34 }
35
36 // report everyone's age a year hence
37 printf("Time passes...\n");
38 for (int i = 0; i < n; i++)
39 {
40     printf("A year from now, person #i will be %i years old.\n", i + 1, ages[i] + 1);
41 }
42 }
```



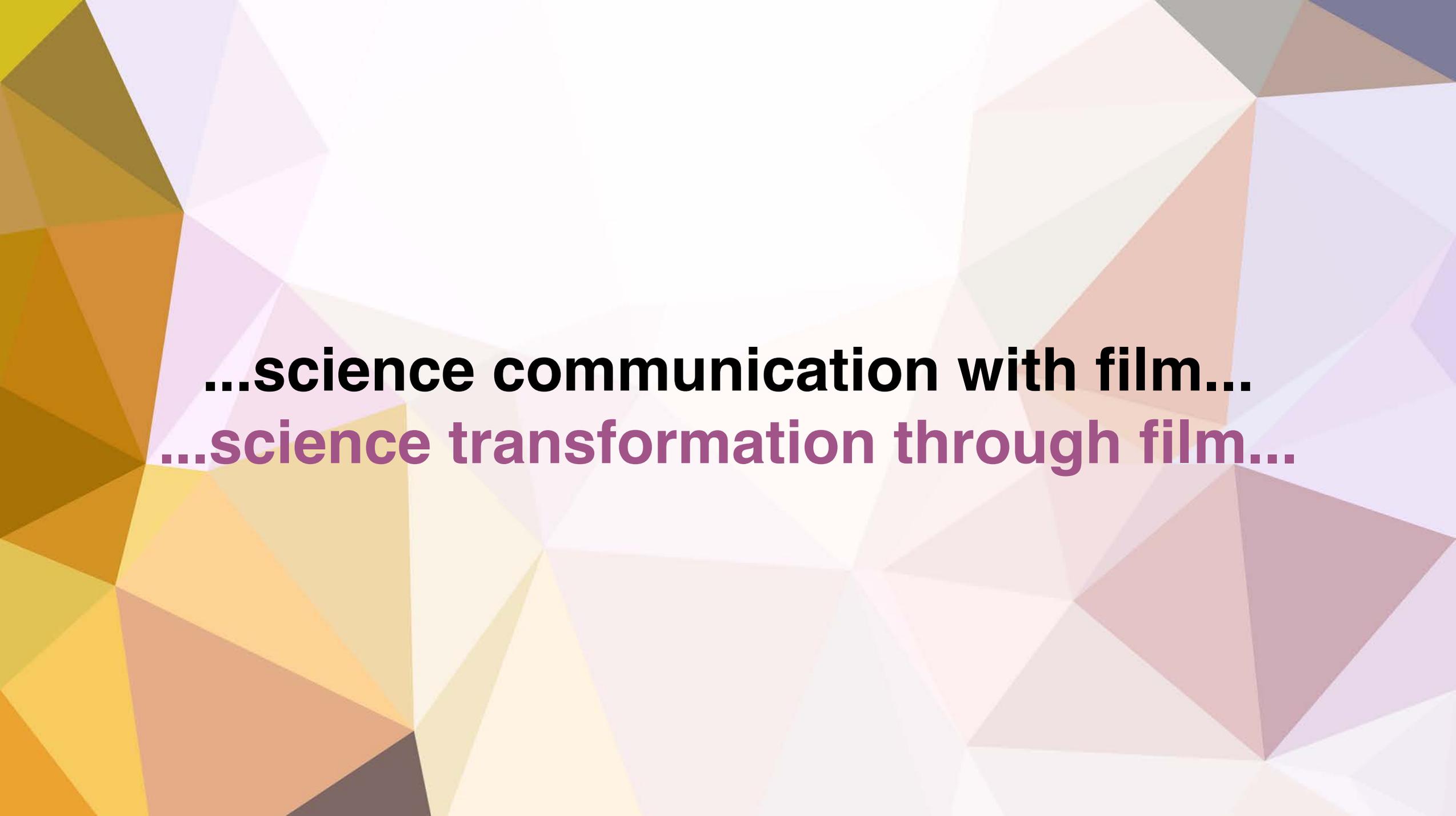
What Does Scalable Mean?

- Operationally:
 - In the past: "Works even if data doesn't fit in main memory"
 - Now: "Can make use of 1000s of cheap computers"
- Algorithmically:
 - In the past: If you have N data items, you must do no more than N^2 operations -- "polynomial time algorithms"
 - Now: If you have N data items, you must do no more than $N \cdot \log(N)$ operations, for some large k
 - Polynomial-time algorithms must be parallelized
 - Soon: If you have N data items, you should do no more than $N \cdot \log(N)$ operations
 - As data sizes go up, you may only get one pass at the data
 - The data is streaming -- you better make that one pass count
 - Ex: Large Synoptic Survey Telescope (30TB / night)

Research Video: Videos in Higher Education – A Journey into the World of Digital Education



**Technoaesthetics
(Technology & Aesthetics)**



...science communication with film...
...science transformation through film...

A grateful task would be [...], to record the shooting of a forest mushroom [...] during a day in a series of shots. This would a very appealing way to study the growing process.

GEORGE WHITESIDES IN BERKOWITZ, JACOB: “VIDEO ABSTRACTS, THE LATEST TREND IN SCIENTIFIC PUBLISHING: WILL PUBLISH OR PERISH SOON INCLUDE VIDEO OR VANISH?”

2013

A grateful task would be [...], to record the shooting of a forest mushroom [...] during a day in a series of shots. This would a very appealing way to study the growing process.

TRANSLATED INTO ENGLISH,
ORIGINAL IN GERMAN:
LUDWIG MACH: »UEBER DAS PRINCIP DER
ZEITVERKÜRZUNG IN DER SERIENPHOTOGRAPHIE«,

1893

You had to be able to describe your science in words, or tables, or in plots. [...] With videos, you can now describe dynamic phenomena which are simply too complicated, too complex, [...] to do in words and two-dimensional pictures.

GEORGE WHITESIDES IN BERKOWITZ, JACOB: "VIDEO ABSTRACTS, THE LATEST TREND IN SCIENTIFIC PUBLISHING: WILL PUBLISH OR PERISH SOON INCLUDE VIDEO OR VANISH?" *UNIVERSITY AFFAIRS*,

2013



(Audio)visual Language
rhetorics and characteristics

A 014

Hörsaal

Mit freundlicher Unterstützung
With friendly support

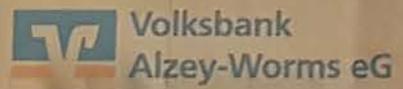




IMAGE-SOUND RELATION

«SYNCHRESE»

Forging of an immediate and necessary relationship between something one sees and something one hears at the same time.

MICHEL CHION: AUDIO-VISION: SOUND ON SCREEN, 1994.

**Chair of Ecosystem
Management, ETH Zurich**
Prof. Dr. Jaboury Ghazoul



Oxford University;
Himalayan Wolf Project
Geraldine Werhahn



M·G·M PRESENTS

FORBIDDEN PLANET

AMAZING!

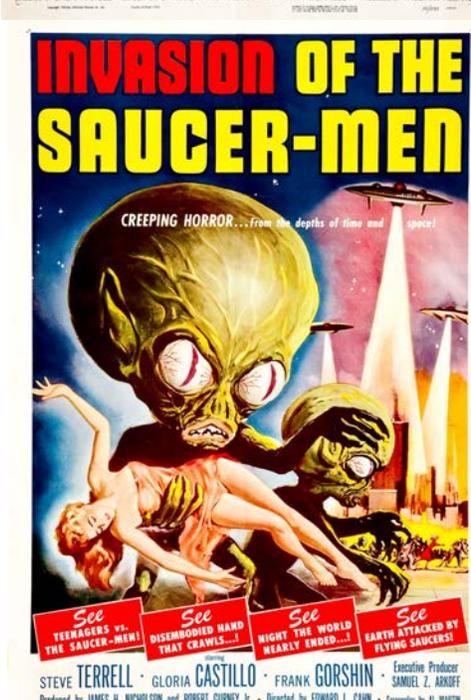
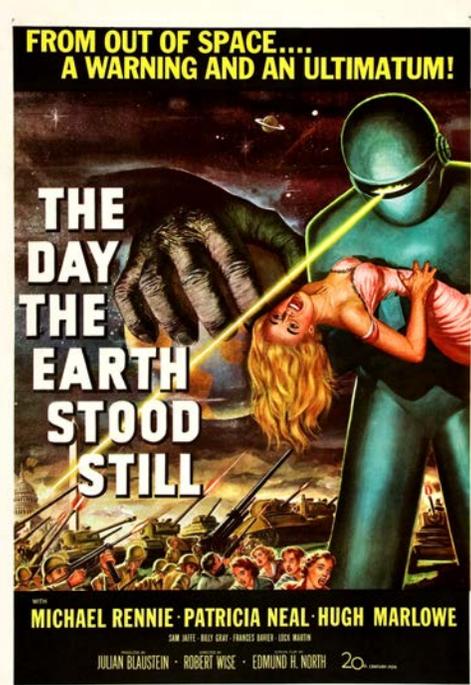


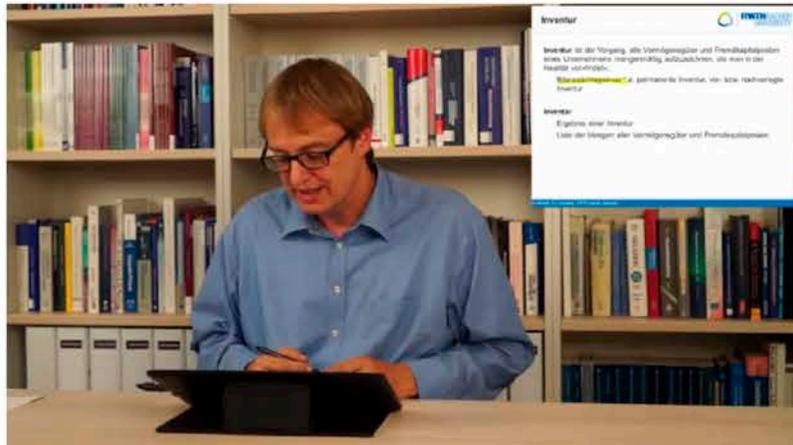
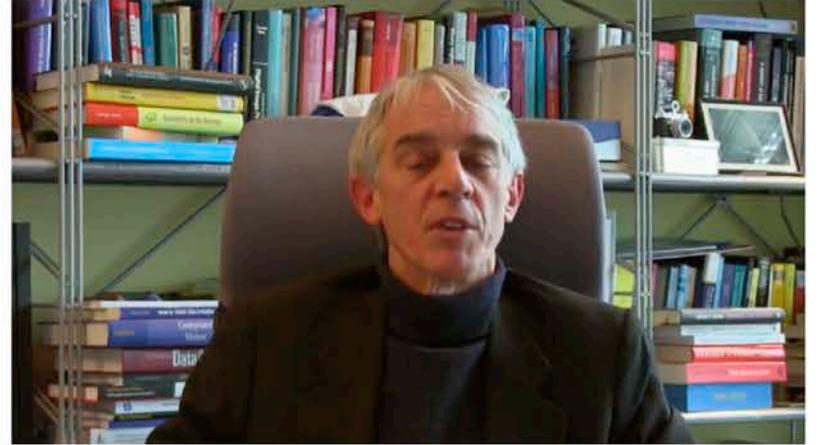
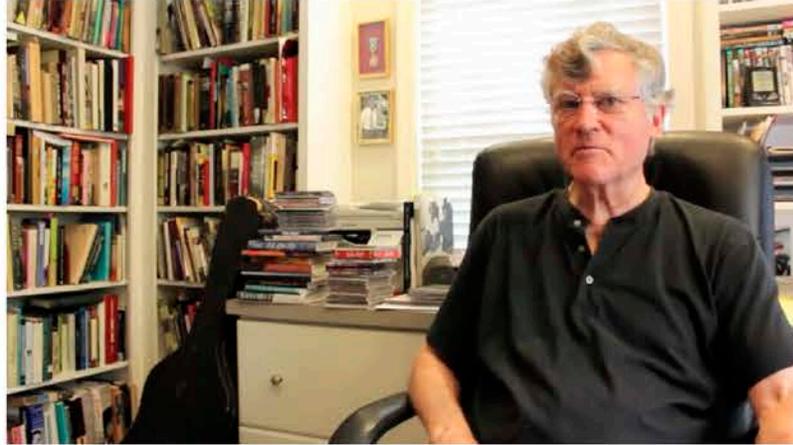
STARRING WALTER PIDGEON · ANNE FRANCIS · LESLIE NIELSEN

WITH WARREN STEVENS AND INTRODUCING ROBBY, THE ROBOT
 SCREEN PLAY BY CYRIL HUME
BASED ON A STORY BY IRVING BLOCK AND ALLEN ADLER
PHOTOGRAPHED IN EASTMAN COLOR

DIRECTED BY FRED McLEOD WILCOX · PRODUCED BY NICHOLAS NAYFACK
 IN CINEMASCOPE AND COLOR

A METRO-GOLDWYN-MAYER PICTURE





Inventar

Inventar ist der Vorgang, alle Vermögensgegenstände und Fremdbeteiligungen eines Unternehmens regelmäßig aufzuschreiben, um einen Überblick zu erhalten.

Bestandteile: je nach Art des Inventars, wie zum Beispiel:

- Eigentum eines Inventars
- Liste der Bestände oder Vermögensgegenstände und Fremdbeteiligungen



► Focus on the message,
not the messenger.

Be generous.

Kill your darlings.

Film making is never a oneman show

*If you do not want to collaborate,
go run a marathon.*

COLLABORATIVE PROCESS DESIGN AND CO-AUTHORSHIP

*Filmmaking is never a
one-man-show.*

*If you do not want to
collaborate, write a book.*





00:09:42:13

Einpassen ▾

Voll ▾

00:21:32:13



empathy_TEASERFINAL

× Empathy_long_FINAL ≡

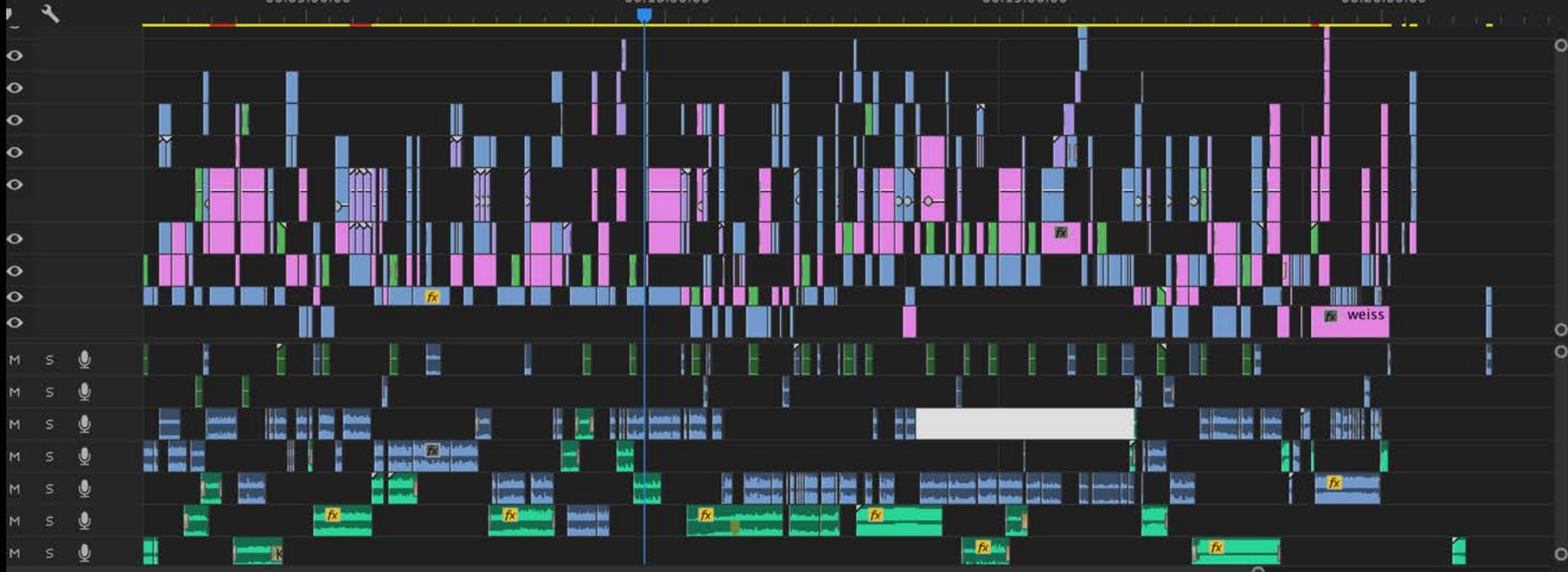
lower_laura

00:05:00:00

00:10:00:00

00:15:00:00

00:20:00:00



Filmmakers

Responsibility «good light»

«Changing perspectives»

Delegate tasks on set (every researcher can be a ‘gaffer taper’)

Stay high-quality aware

Be strikt on deadlines, decisions

Avoid meaningless hyperaesthetics

► *Video made and*

killed the lecture star



Jeanine Reutemann

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