

# Preparing and Presenting an Effective Lecture

There is no cookie cutter  
approach

# Know the Material

- Demonstrate confidence
- Review the material
- Practice your lecture
- Revise if necessary
- Be passionate

# Know the Room

- Learn the lecture room
- Arrive early
- Walk around the speaking area
- Practice with the AV equipment

# Detach Yourself From Your Own Interests

- Consider the needs of the students
- Don't teach material that's only of interest to you
- Theory and science not applicable to patient care are okay, but ...
- Put yourself in the position of the student
- Know the audience

# Choose Your Material Carefully

- Limit amount of material
  - Include all necessary material
  - If excessive, little is learned
- Limit complexity of material
  - Avoid
  - Simplify
  - Explain

# Target Audience

- Any student that wants to learn
- Donald Seldin: “Teach to the least intelligent student in the class. Anyone can teach a genius. What separates good teachers from great teachers is the ability to teach students at the lower end of the class.”

# Engage the Students

- Make the students partners with you regarding the subject
- Give them a reason to care
- Explain to the students why they should be interested in the material

# Engage the Students

- Make eye contact
- Use your hands
- Move
- Face the audience
- Use the laser pointer minimally



# Engage the Students

- Humor
  - Spontaneous
  - Relevant
  - Balance entertainment with information
  - Medical cartoons available on internet
- Enthusiasm
  - Be interested in material
  - Be interested in teaching



“Bummer of a birthmark, Hal.”

# Engage the Students

- Pay attention to the audience
- Modify your speaking style and actions based on audience response
- State rhetorical questions from the student's point of view

# Attitude

- Relax
- Exercise
- Mentally walk your way through the experience step by step
- The audience wants you to succeed
- Don't apologize
- Turn nervous energy into enthusiasm
- Gain experience and training

# Voice Tips

- Adequate speaking level
- Microphone
- Articulate every word
- Don't speak with too many words in one breath
- Rest your voice
- Keep water available

# Voice Tips

- Avoid alcohol and caffeine before speaking
- Be rested
- Don't smoke
- Avoid eating or drinking just prior to lecture
- Treat or avoid heartburn

# Slides

- Slides can be deadly
  - Students need to listen to you and think
  - Too many words → too much writing
  - Reflex pathway
- Slides are okay if best for presenting information
  - Not just for your convenience
  - Displaying images
  - Put them in the syllabus or handout

# Slides

- Don't include material you won't discuss
  - Distracting
  - Don't use old slides
- “I apologize for this slide.”
  - Unacceptable expression
  - Don't apologize. FIX IT!



# Slides

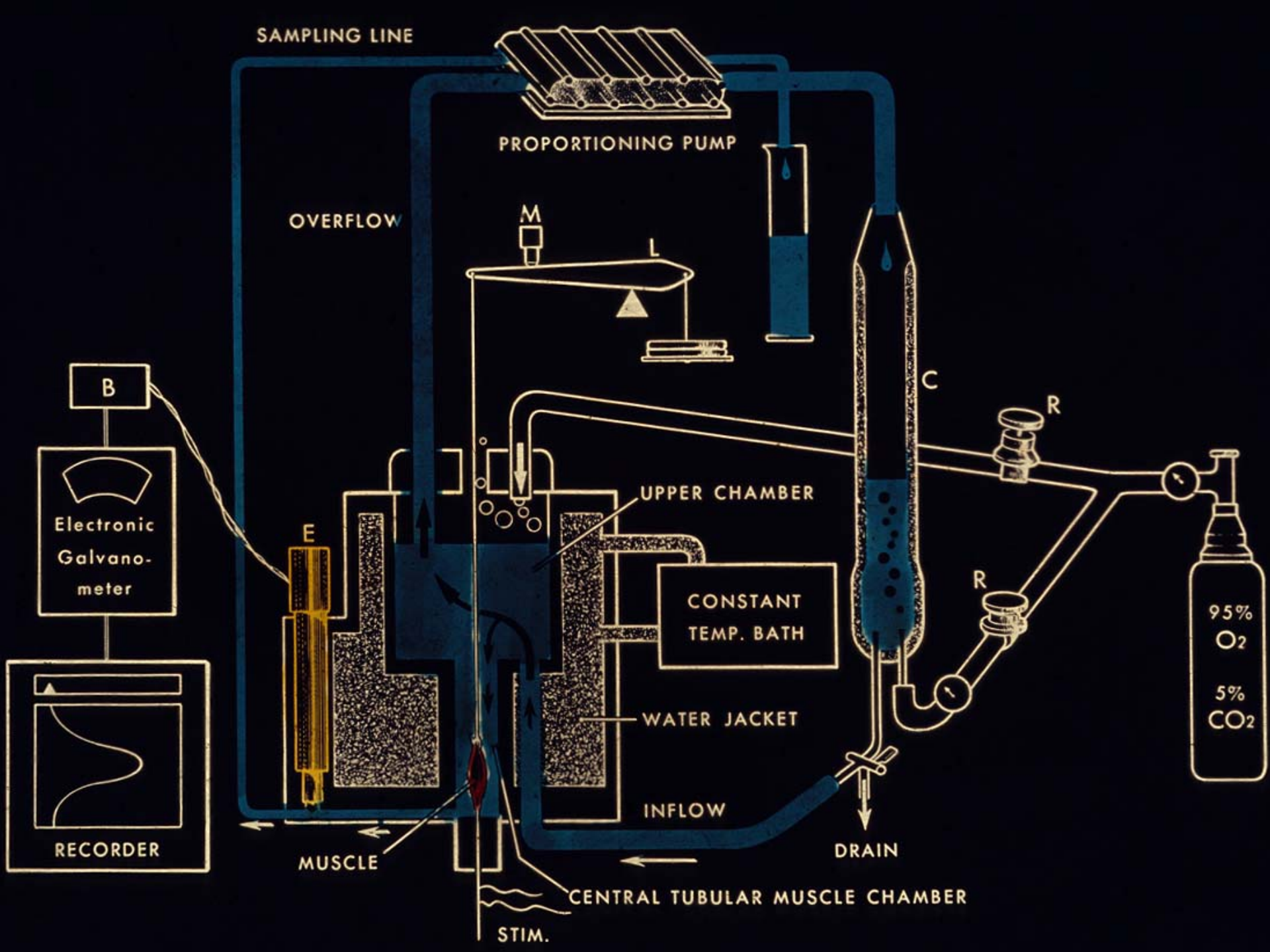
- A font size of 32 is ideal
- 28 font is also easy to see
- Font size 24 is acceptable
- A font size of 20 may be difficult to see from the back of a large room
- Forget about size 16 font or lower, unless it is a disclaimer that you don't want the audience to read

# Slides

- Keep the background simple
- Use just one or two colors for fonts
  - Avoid dark colors
  - Use bright colors
- Use light font on a darker background
- Color blind students
- 12 lines per slide, if possible
- List the main point on each bullet, then expand on it verbally
- Minimize movement and audio if it distracts from your message

# Examples of Bad Slides

We've all used these!



## Resistive Exercise Instructions for Older Participants

- The participant should perform at least a 10-minute full-body warm-up before each resistive exercise session, to include flexibility exercises.
- The participant should be instructed to breathe normally or exhale during muscle contraction, without breath-holding.
- Have the participant maintain a loose, comfortable grip during muscle contraction on each resistive modality.
- The participant should perform lifting movements through a complete range of motion, or their "pain-free" zone.
- Machine and free weights should be lifted smoothly to a count of two, held for a count of one, and then lowered slowly to a count of four.
- All major muscle groups should be exercised—large muscles should be worked before smaller muscles.
- The participant should learn and practice proper form and technique on each piece of strength training apparatus.
- The participant should never drop the free weights or bang the machine weights.
- The participant can avoid injury by adhering to the instructions of the health professional and by adhering to the written instructions at the weight station.
- Resistive exercise should be terminated if the participant develops symptoms of intolerance, such as chest pain, dizziness, faintness, fatigue or joint/muscle pain.
- Never permit the arthritic participant to perform strength training exercises during periods of inflammation.
- The participant should record the amount of resistance (e.g., the number of machine plates, color of elastic band), the number of repetitions and the number of sets performed on a recording form provided by the health professional. This record should be maintained over time to record weight progression or regression.

**PAPULOSQUAMOUS:**

PSORIASIS  
 PITIRIASIS ROSEA  
 SECONDARY SYPHILIS  
 LICHEN FLAMUS  
 DERMATOPHYTOSIS  
 SUBACUTE CUTANEOUS  
 LUPUS ERYTHEMATOSUS  
 MYCOBACTERIAL  
 MYCOBACTERIAL  
 DERMATITIS  
 ATOPIC DERMATITIS  
 CONTACT DERMATITIS  
 MUCOSAL  
 DERMATITIS

**VEHICULAR:**

IMPETIGO  
 CONTACT DERMATITIS  
 HERPES SIMPLEX  
 HERPES ZOSTER  
 VARICELLA  
 PEMPHIGUS  
 ERYTHEMA  
 MULTIFORME  
 EPIDERMOLYSIS  
 BULLOSA  
 BULLOUS PEMPHIGOID  
 HERPES GESTATIONIS  
 DERMATITIS  
 HERPETIFORMIS  
 PORPHYRIA

**ERYTHEMATOUS:**

ACNE  
 ROSACEA  
 PSORIASIS  
 DRUG ERUPTION  
 REITER'S DISEASE  
 VIRAL INFECTIONS  
 INSECT BITES

**SCLEROSIS:**

MORPHEA  
 SCLERODERMA  
 PORPHYRIA  
 LICHEN SCLEROSIS  
 ET ATROPHICUS  
 CHRONIC STASIS

**ICHTHYOSIFORM:**

ICHTHYOSIS  
 VULGARIS  
 ACQUIRED  
 ICHTHYOSIS  
 X-LINKED  
 ICHTHYOSIS  
 LAMELLAR  
 ICHTHYOSIS  
 RUD'S SYNDROME

**EXFOLIATIVE**

ERYTHERODERMA  
 MYCOBACTERIAL  
 PSORIASIS  
 PITIRIASIS RUBRA  
 PILARIS  
 ATOPIC DERMATITIS  
 CONTACT  
 DERMATITIS  
 PEMPHIGUS  
 FOLIACEUS  
 HODGKINS LYMPHOMA  
 LEUKEMIA  
 DRUG ERUPTION

**CIRCUMSCRIBED**

HYPERMELANOSIS:  
 VITILIGO  
 TUBEROUS  
 SCLEROSIS  
 ARSENIC INGESTION  
 POST-INFLAMMATORY  
 TINKA VERSICOLOR  
 HANSEN'S DISEASE  
 DISCOID LUPUS  
 ERYTHEMATOSUS

**CIRCUMSCRIBED**

HYPERMELANOSIS:  
 CAFE-AU-LAIT  
 MACULES  
 FRECKLES  
 LENTIGINES  
 NEVI  
 ACANTHOSIS  
 NIGRICANS  
 MELANMA  
 PEUTZ-JEGHERS  
 SYNDROME  
 MELANOMA  
 POST-INFLAMMATORY  
 DRUG ERUPTIONS

**DIFFUSE**

HYPERMELANOSIS:  
 HEMOCHROMATOSIS  
 WILSON'S DISEASE  
 PORPHYRIA  
 ADDISON'S DISEASE  
 ARSENIC INGESTION  
 SYSTEMIC  
 SCLEROSIS

**MODULES WITHOUT**

INFLAMMATION:  
 SARCOIDOSIS  
 AMYLOIDOSIS  
 XANTHOMAS  
 GOUT  
 METASTATIC  
 CARCINOMA  
 LIPOMAS  
 BASAL CELL  
 CARCINOMA  
 KERATOCANTHOMA  
 RHEUMATOID  
 NODULES

**MODULES WITH**

INFLAMMATION:  
 ERYTHEMA NODOSUM  
 ABSCESSES  
 LYMPHOMAS  
 FUNGAL INFECTIONS  
 HANSEN'S DISEASE  
 PANICULITIS DUE  
 TO PANCREATITIS  
 VASCULITIS

**PURPURA WITH**

INFLAMMATION:  
 SYSTEMIC  
 VASCULITIS  
 BACTEREMIAS

**PURPURA WITHOUT**

INFLAMMATION:  
 SENILE PURPURA  
 AMYLOIDOSIS  
 SCURVY  
 THROMBOCYTOPENIA

**MODULO-CERATIVE:**

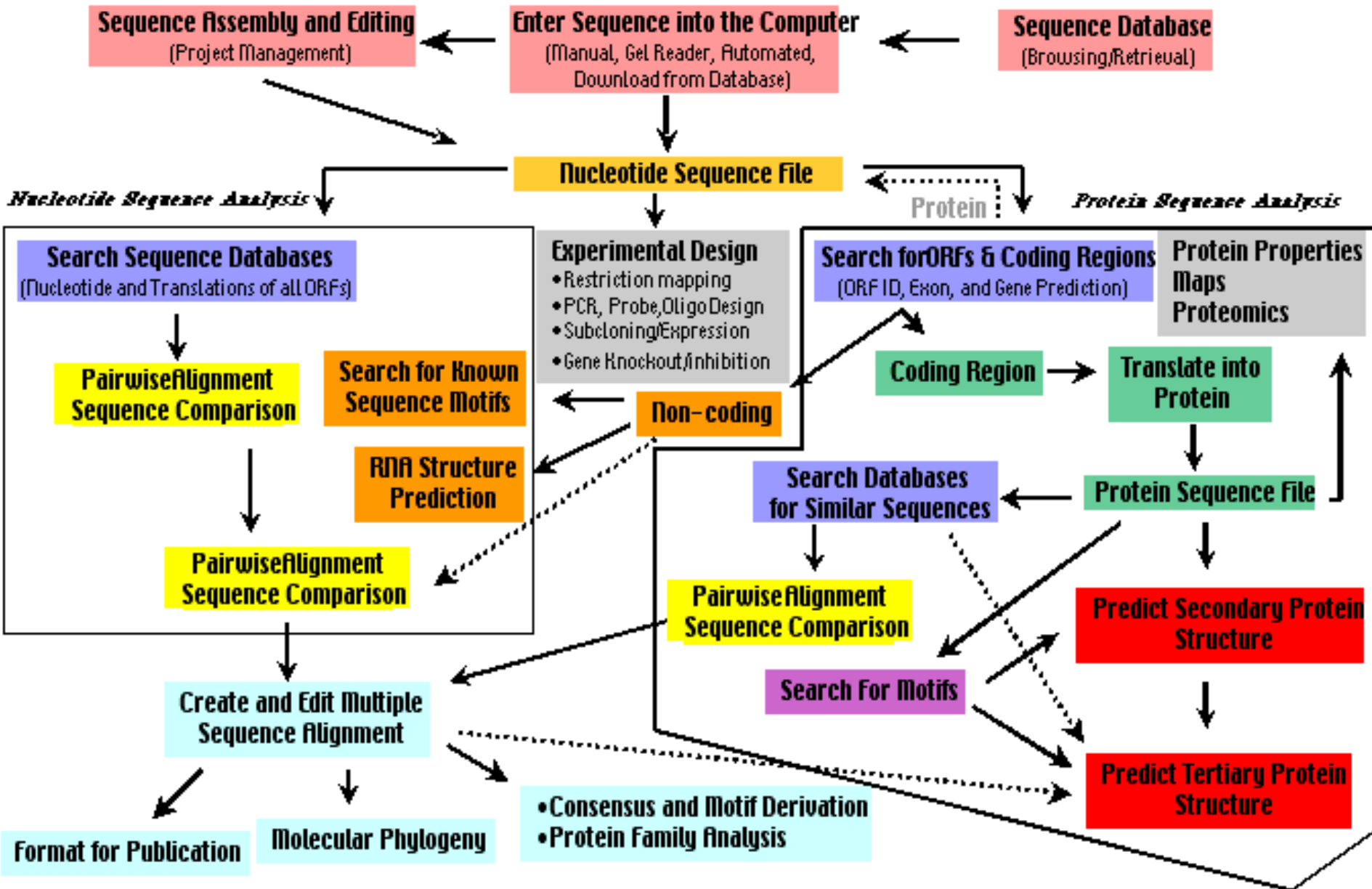
TULAREMIA  
 ANTHRAX  
 SPOROTRICHOSIS  
 PRIMARY SYPHILIS  
 CHANCROID  
 ORF  
 BUBONIC PLAGUE  
 BASAL CELL  
 CARCINOMA  
 SQUAMOUS CELL  
 CARCINOMA  
 MYCOBACTERIAL  
 FACTITIAL  
 PRODERMA  
 GANGRENOSUM  
 GOUT

R 1 CCCTCCGGGAGGAGCAGCCGCTGCCGCCAGGACTGGGCCCTTAGGGAGGAGGAGGCGAGAAGATGGCGGAC 72  
H 73 \*\*\*\*\* 144  
R 73 GACCCAGTGCCTGCCGACAGGAACGTCGAAATCTGGAAGATCAAGAAGCTCATTAAGAGCTTGGAGCGGGC 144  
H 145 \*\*\*\*\*G\*\*\*\*\* 216  
R 145 CGGGCAATGGCACCAGCATGATATCATTTGATCATTTCTCCCAAAGACCAGATTTCCCGAGTGGCAAAATG 216  
H 217 \*\*\*\*\*A\*\*\*\*\* 288  
R 217 TTAGCAGATGAATTTGGAAGTGCATCCAACTTAAAGTCAAGAGTAAACCGGCTTTCAGTCTCGGAGCCAT 288  
H 289 \*\*\*\*\*G\*\*\*\*\*T\*\*\*\*\* 360  
R 289 ACATCTGTACAACAAGACTCAAACCTTTATAACAAGTACCTCCAAATGCTCTGGTTGTTTACTGTGGAACA 360  
H 361 \*\*\*\*\*A\*\*\*\*\* 432  
R 361 ATGTAAACAGAAGAAGGAAAGGAAAGAAAGTCAACATTGACTTTGAACTTTCAAACCAATTAATCGTCA 432  
H 433 \*\*\*\*\* 504  
R 433 TTGTATTTGTGTGACAACAAATCCCATACAGAGGCTCTTACAGCACTACTTTCAGATGATAGCAGTTTGGC 504  
H 505 \*\*\*\*\*A\*\*\*\*\* 576  
R 505 TTCATTTGTAATAGATGCTAGTGGTGCACITTTTGGCACACTGCGAGGAAATACAAGAGAAGTCTCCACAAA 576  
H 577 \*\*\*\*\*C\*\*\*\*\*A\*\*\*\*\* 648  
R 577 TTCCTGTGGATCTCCCAAGAAACACGGTAGAGGAGGTTCAGTCAAGCTTGCCTTTTGCCTGTTTAAAGAAATG 648  
H 649 \*\*\*\*\* 720  
R 649 GAAAAGCGACACAACATATGTTCCGAAAGTAGCAGAGACTGCTGTACAGCTGTTTATTCTGGGGACAAAGTG 720  
H 721 \*\*\*\*\*T\*\*\*\*\*G\*\*\*\*\* 792  
R 721 AATGTGGCTGGTCTCGTTTAGCTGATCAGCTGACTTTAAAACGAACTAAGTCAATCTGATATGTTTGAC 792  
H 793 \*\*\*\*\*A\*\*\*\*\*C\*\*\*\*\* 864  
R 793 CAGAGTTCGAATCAAAGTTTAAAATAGTTGATATATCCATATGGCGGTGAAAATGATTCACCAAGCT 864  
H 865 \*\*\*\*\*A\*\*\*\*\*T\*\*\*\*\* 936  
R 865 ATTGAGTTATCTACAGAGTCCCTTCCAAAGTGAATTCATTCAGAGAAGAAATTAATAGGACGATACTTT 936  
H 937 \*\*\*\*\*A\*\*\*\*\* 1008  
R 937 GATGAAATCAGTCAAGACACGGGCAAGTACTGTTTGGAGTGAAGATACGCTAAAAGCTTTGAAAATGGGA 1008  
H 1009 \*\*\*\*\*C\*G\*\*\*\*\*A\*\*\*\*\*G\*\*\*\*\* 1080  
R 1009 GCCGTAGAAAATCTAATAGTCTATGAAAATTTGGATATAATGAGATACGTTCTTCATTTGCCAAGGCAAGAA 1080  
H 1081 \*\*\*\*\*T\*\*\*\*\*C\*\*\*\*\* 1152  
R 1081 GAGGAGAAAATCTTTACCTAATCCAGAACAAGAGAAGGATAAATCTCATTTACAGACAAGAGACAGGA 1152  
H 1153 \*\*\*\*\*C\*G\*\*\*\*\*A\*\*\*\*\*C\*\*\*\*\* 1224  
R 1153 CAGGAACATGAGCTGATTTGAGAGCATGCCCTGTTGGAAATGGTTTGCCTAACCAACTATAAAAAATTTGGAGCT 1224  
H 1225 \*\*\*\*\*T\*G\*\*\*\*\* 1296  
R 1225 ACATTTGAAAATTTGTACAGATAAGTCAAGAAAGGATCCAGTTTGTGAAAGGATTTGGTGGAAATGGAGGT 1296  
H 1297 \*\*\*\*\*A\*\*\*\*\*G\*+T\*\*\*\*\* 1368  
R 1297 ATCTTCCGGTACCGAGTAGATTTCCAGGAAATGGAATATCAAGGAGGAGCAGATGAATTTTTCACCTTGAT 1368  
H 1369 \*\*\*\*\*C\*\*\*\*\* 1440  
R 1369 GACTACTAGGAGTAGTCCGACATGGGTCCGGCAAAACGTCCTCGCCCTCCAGCATCCACCCAAGGAGCATAAC 1440  
H 1441 \*\*\*\*\*A\*\*\*\*\* 1512  
R 1441 CGTGGTGGAAATCCAAACAGATCCCTGCCCTTACAAATTTGGAACATTTCCAGAACTTAATCCATGAGCATTTGGAT 1512  
H 1513 \*A\*\*\*\*\* 1584  
R 1513 ATTGAAAAGAAAACCGAAACAAAACAGGCCCAACCTACACTTTGGTTTGTATGGTGTGACCGCAGCAGC 1584  
H 1585 \*\*\*\*\*A\*\*\*\*\*G\*\*\*\*\* 1656  
R 1585 CTACAACTAAGTTCTTAAATGCCACTTTGGACTAATTTAAAAAGAAATCCCAATTTTACTTTTACTCGATG 1656  
H 1657 \*\*\*\*\*C\*\*\*\*\*G\*\*\*\*\*G\*\*\*\*\* 1728  
R 1657 GTGAAATTTGGTCTTGTATTTTATGAAAAA--TGATTTTTTAACTTTCATACATAGAAGCAAAAATA 1726  
H 1729 \*\*\*\*\*AA\*\*\*\*\* 1800  
R 1727 CTTTAACTGCTGTAAACCTTCAAAGTTAATAGAAGTGAATCATACTGGTTTGTCTTATTTTGTATTGCA 1798  
H 1801 \*\*\*\*\* 1872  
R 1799 GAAAAATTTAAATTTGCTGCATTTGGCAGTGACCCATTTACATGGCATTTCCAGCTTAGACTGCATAAGAAGAA 1870  
H 1873 \*\*\*\*\*G\*\*\*\*\* 1944  
R 1871 ATATATGTGGTGAATGTTGGAAACCATTTCTCTCTTGGTCTCTGTTTAAATGTTGAAAGGGTGAAGCTAATAGG 1942  
H 1945 \*\*\*\*\* 2016  
R 1943 AGGCATGTCATCTTCCCTCAGACTCTCCCTTCCCTTAAACAGACTGTCAATTTCAAGGATGCAAACTG 2014  
H 2017 \*\*\*\*\*C\*+T\*\*\*\*\*G\*AC\*\*\*\*\*G\*CT\*\*\*\*\*G\*+G\*\*\*\*\*T\* 2088  
R 2015 CATTGCAAGGTCAAACCTGACTCAAGAAGCATCTGGGCCAGTGCACCTGTTTACTTCCATGTGTTTGGCAGCCA 2086  
H 2089 \*\*\*\*\*AA\*\*\*\*\*T\*\*\*\*\*C\*\*\*\*\*C---A\* 2159  
R 2087 CGTTTGGGCACAGCATTTGGGAGCCCTTTGTATCAGTTG--CTTTGACAAAGGTCCTTAACTCT--AGCCTAT 2156  
H 2160 \*A\*\*\*\*\*C\*G\*+G\*\*\*\*\*A\*GTT\*--\*\*\*\*\*G\*\*\*\*\*TAT\*A\*\*\*\*\*T\*A\*\*\*\*\*C 2229  
R 2157 TAGAAACCACTGGAGATGCATATGATGGGCTCTCTGCTGTTGCTGGGATGGCGAAAATAAACAATGCA 2228  
H 2230 \*C\*\*\*\*\*G\*+T\*G\*\*\*\*\*A\*\*\*\*\* 2301  
R 2229 ATTTCAGTGGAAAAA\*\*\*\*\* 2255  
H 2302 \*\*\*\*\* 2373

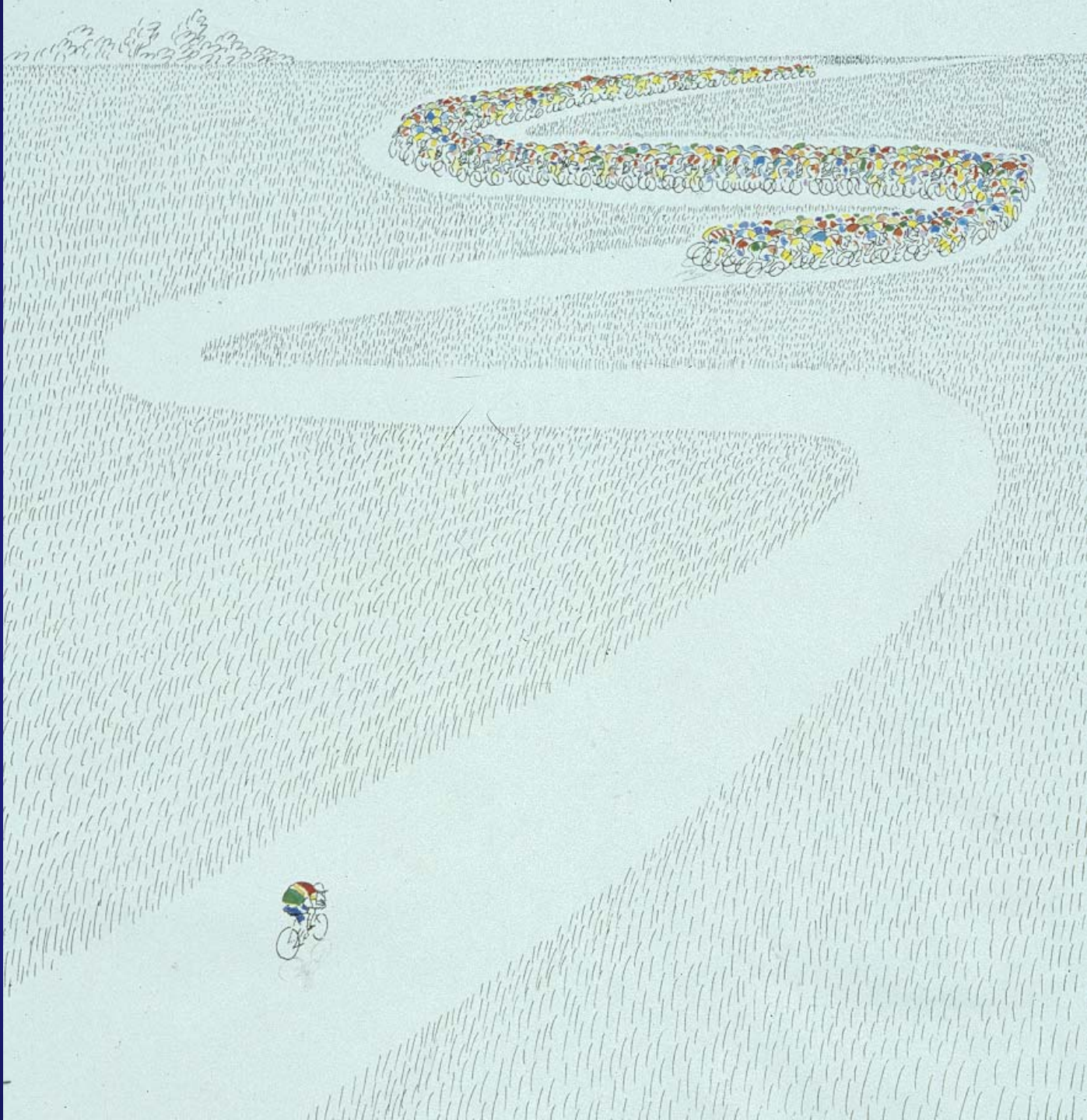


# Sequence Analysis Overview Flow Chart

1/30/01







# Blackboard

- Advantages of the “blackboard”
  - You can’t write faster than the students can
  - Allow them to relax and listen to you
  - The time and effort it takes to write on the board causes you to limit what you write
    - The material eliminated is generally not missed by anyone

**Above All...**

**Be Yourself**