

**Famous Biochemist Poster**

**DUE DATE**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**MY BIOCHEMIST**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Background:** Our unit on biochemistry will focus on the major organic compounds that make up living things, including carbohydrates, proteins, lipids, DNA, and enzymes. You will be assigned a famous biochemist that made ground-breaking discoveries in one of these areas of research. You are to research your biochemist and create a neat, creative presentation that highlights their major accomplishments in this field. You can create your poster using canva.com or piktochart.com or just use regular poster board. These will be hung in the classroom for a gallery walk.

**Basic Requirements:**

1. First, middle and last name of your scientist

2. Picture of your scientist

3. His/Her birthday

4. Date of death or current age if still living

5. Country he/she was born in

6. What did they do? Why are they famous? Write this in 4-6 complete sentences. Explain any new concepts learned.

7. Where he/she did their work (ex: name of university, country, etc.)

8. List of at least 3 major accomplishments or awards they were given.

9. Your name in the bottom right corner.

10. A list of sources that you used on the back of your poster.

-You need to include the FULL URL (not just google.com)

-Do NOT cite Wikipedia. It is not a credible source. It can be a good place to start to get an overview of your scientist, but you should get your factual information elsewhere.

**Choose 5 of the following requirements to add to your poster:**

1. A quote by the scientist

2. 1-2 additional pictures of your scientist

3. A picture of what your scientist worked on (ex: enzymes, DNA)

4. Where they went to school or college

5. If they had any other jobs (ex: teacher, lawyer, doctor, etc.)

6. What else was happening in history while this scientist was famous?

7. Did this scientist work with another scientist? Who was it, and what did they do?

8. Are there any museums or other places that are named after your scientist? Where is it?

9. Place your poster on a piece of construction paper to make it sturdy and add a border.

**Your grade will be determined by:**

-Overall presentation, neatness, and creativity

-Spelling, grammar, sentence structure, and accuracy of information

-Completeness – all requirements have been met

-Handed in on time

1. **Elizabeth Blackburn** – telomeres/telomerase enzyme

2. **Gerty Cori** – Cori Cycle (glycogen and lactic acid)

3. **William Astbury** – X-ray diffraction of proteins and DNA

4. **Isaac Asimov** – science fiction/popular science author

5. **Konrad Emil Bloch** – cholesterol and fatty acid metabolism

6. **Adrian John Brown** – enzyme kinetics; fermentation

7. **Eduard Buchner** - fermentation

8. **Dean Burk** – Lineweaver-Burk plot, biotin

9. **Robert Corey** – protein structure (α-helix and β-sheet)

10. **James Watson** – structure of DNA

11. **Carl Peter Henrik Dam** – vitamin K

12. **Kary Mullis** – Polymerase Chain Reaction (PCR)

13. **Christian de Duve** – peroxisomes and lysosomes

14. **Aila Keto** – Rainforest Conservation

15. **Lafayette Mendel** – nutrition (vitamins)

16. **Alec Jeffreys** – DNA fingerprinting

17. **Heinz Fraenkel-Conrat** – tobacco mosaic virus and holmes ribgrass virus, various hormone/medical studies

18. **Rosalind Franklin** – X-ray crystallography, DNA structure

19. **Frederick Griffith** – bacterial transformation, Griffith’s experiment

20. **Walter Gilbert** – protein synthesis (messenger RNA), DNA sequencing

21. **Linus Pauling** – biological molecule structure, chemical bonds

22. **Allan Wilson** – molecular (DNA/protein) approach to evolution, human evolution, molecular clock

23. **Choh Hao Li** – human pituitary growth hormone

24. **Harden McConnell** – electron and nuclear techniques of studying cell membranes and proteins

25. **Frederick Sanger** – DNA sequencing

26. **Alexander Flemming** – penicillin antibiotic, lysosome organelle

27. **Dorothy Hodgkin** – protein crystallography

28. **Leonora Menten** – enzyme kinetics, Michaelis-Menten equation

29. **Howard Cedar** – DNA methylation (turns genes on and off)

30. **Shinya Yamanaka** – Induced Pluripotent Stem Cells

31. **Alfred Sturtevant** – genetic mapping (determining the order of genes on chromosomes)

32. **Herbert Boyer** – first to genetically engineer bacteria to express human genes (they produced insulin)

33. **Arthur Kornberg** – mechanism by which DNA is made and copied in cells (DNA replication)

34. **Hans Krebs** – cellular respiration for making energy in cells

35. **Har Gobind Khorana** – determined that the sequence of DNA was the template for building proteins

36. **Ernst Ruska** – built electron microscope, electron optics

37. **Barbara Mcclintock**- transposons (genes that can jump around chromosomes) in maize (corn)

38. **Karl Landsteiner** – blood types

39. **Ian Wilmut** – first to successfully clone an animal

40. **Craig Venter**- Human Genome Project