Lwoff on Protein Production
1000 in Kresge for Lecture

The question of how true proteins are made was the topic of Dr. Andre Lwoff's second Cambridge Lecture in the Kresge Auditorium. An audience of 1000 heard the French biological scientist discuss the mechanism of protein synthesis. Dr. Lwoff explained that a living organism is composed of proteins, nucleic acids, and water, and that this is brought about by the union of amino acids molecules. A given amino acid builds a particular protein. To reproduce true type, an organism must have the correct information to produce the proteins. Since 20 amino acids known, a large number of arrangements can be possible.

Nucleic Acid Determines Arrangement
Illustrating his talk with several slides, Dr. Lwoff continued that it is the nucleic acid which contains the information a cell must have to reproduce protein arrangements. Nucleic acid is thus the "blue-print" that tells the organism what proteins to produce. It is composed of long chains of nucleotides, each nucleotide containing a nitrogenous base. Adenine, thymine, guanine, and cytosine form the bases. The nitrogenous bases pair with either thymine or cytosine. In this way, the bases form a ladder which serves as the foundation of the imperfect helix.

Dr. Lwoff further explained that each living cell contains a certain amount of nucleic acid. He stated that a living cell can be kept alive for a few months only if it retains a large amount of nucleic acid. If the cell is deprived of nucleic acid, it dies. Dr. Lwoff said that this is the mechanism for heredity.

Nucleic Acid Controls Protein Synthesis
Dr. Lwoff explained that he and Dr. Paul Broth have found that the nucleic acid is the molecular basis for the control of protein synthesis. Their studies have shown that the nucleic acid is synthesized according to the genetic code of the organism. The genetic code is a set of instructions that tells the cell how to make proteins.

Dr. Lwoff said that the nucleic acid is made up of four different types of nucleotides: adenine, thymine, guanine, and cytosine. Each of these nucleotides is connected to a sugar molecule, which is then linked to a phosphate group. The result is a nucleotide, which can be thought of as a simple building block of the nucleic acid.

Protein Synthesis
Dr. Lwoff explained that protein synthesis occurs when the nucleic acid is transcribed into messenger RNA (mRNA). The mRNA then travels to the ribosomes, where it is translated into a protein. The ribosomes use the mRNA as a guide to assemble the protein, using the genetic code as a blueprint.

Dr. Lwoff also discussed the role of transfer RNA (tRNA) in protein synthesis. tRNA molecules are charged with specific amino acids, which are then used to build the protein. The tRNA molecules match up with the mRNA according to the genetic code, ensuring that the correct amino acids are added to the protein.

In conclusion, Dr. Lwoff emphasized the importance of nucleic acid in controlling protein synthesis. He stated that nucleic acid is the blueprint for life, and that it is through this blueprint that the cell is able to produce the proteins necessary for its survival.

---

Rice Benefits Racketeers; Second Government Exists
Dr. Victor Riesel gave some examples of union interference especially with regard to governmental contracts which cost this nation and its taxpayers an enormous and large sum each year. A case given was the construction of an Atomic Energy Commission power plant in which union leaders held contracts through which they controlled the supply of skilled labor in the area. They demanded that the head contractor be a Federal employee, at a total cost of $1 billion.

Dr. Riesel also discussed the plight of the civil rights movement, which he believed to carry the information to the multitudes of the American people. He stated that civil rights were a matter of conscience, and that they must be won by peaceful means.

---

Jim Allen's 20-Mile Run
This past Saturday, Jim Allen, '60, put in a impressive 20-mile run. He started off at 6:00 A.M. at his home and arrived at the Kresge Auditorium at 10:00 A.M. The run was divided into five segments, with Allen running 4 miles, 3 miles, 5 miles, 3 miles, and finally 3 miles.

Allen's run was a test of his endurance and strength. He ran at a steady pace, maintaining a speed of around 6 miles per hour. Allen's dedication to running is evident in his numerous races and competitions, including the Boston Marathon and the New York City Marathon.

---

City Council Approves Spring Carnival
The City Council has approved the MIT Spring Carnival for the upcoming weekend. The carnival will feature a variety of activities, including carnival rides, games, and food vendors. The event is open to the public and admission is free.

The carnival will take place on Saturday, April 5th from 10:00 A.M. to 10:00 P.M. and on Sunday, April 6th from 1:00 P.M. to 7:00 P.M. The location is the MIT Campus and it will be held rain or shine.

---

The Tech Staff Meeting
The Tech Photography Staff Meeting will be held on April 16th, 12:15 p.m. The meeting will begin with the Tech Photography Staff, which includes photographers and photo editors, discussing their work and plans for future projects.

The meeting will be held in the Kresge Auditorium, which has several large screens and a sound system. The staff will have the opportunity to discuss and plan for their next projects, including the upcoming carnival.

---

Tech Yearbook Staff Meeting
The Tech Yearbook Staff Meeting will be held on April 16th, 12:15 p.m. The meeting will begin with the Tech Yearbook Staff, which includes editors, designers, and photographers, discussing their work and plans for future projects.

The meeting will be held in the Kresge Auditorium, which has several large screens and a sound system. The staff will have the opportunity to discuss and plan for their next projects, including the upcoming carnival.

---

The Tech Photography Staff Meeting
The Tech Photography Staff Meeting will be held on April 16th, 12:15 p.m. The meeting will begin with the Tech Photography Staff, which includes photographers and photo editors, discussing their work and plans for future projects.

The meeting will be held in the Kresge Auditorium, which has several large screens and a sound system. The staff will have the opportunity to discuss and plan for their next projects, including the upcoming carnival.