

NSC Symposium Series No. 4

# Recent Advances in Genetic Engineering

Cosponsored by  
National Science Council  
Academia Sinica

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Published by  
National Science Council  
Taipei, Taiwan  
Republic of China  
October, 1982

# Program

## January 11, 1982 (Monday)

- 08:00-08:30 Registration
- 08:30-08:35 Opening address  
Dr. Shih-Liang Chien ( 錢思亮 )  
President of Academia Sinica
- 08:35-08:50 Greeting  
Minister K.T. Li ( 李國鼎 )
- 08:50-09:00 Introduction of Speakers  
Dr. Ko-Chang Hsieh ( 謝克昌 )  
Director, Division of Life Science, National Science Council
- 09:00-09:10 Historical Perspectives and Scope of the Symposium  
Dr. Ru-Chih C. Huang ( 黃周汝吉 )  
Professor of Molecular Biology, The Johns Hopkins University

## MORNING SESSION

### *The Basic Tools*

- Chairmen: Dr. T.T. Kuo ( 郭宗德 )  
Dr. C.C. Yang ( 楊振忠 )
- 09:10-09:40 Overview Genetic Engineering Technology  
Dr. Ray J. Wu ( 吳 瑞 )  
Professor of Biochemistry, Cornell University
- 09:40-09:50 Discussion
- 09:50-10:20 Multifunctional Restriction Enzymes  
Dr. Robert Yuan ( 袁致遠 )  
Head, Nucleic Acid Research Section  
Cancer Biology Program, Frederick<sup>1</sup> Research Center
- 10:20-10:30 Discussion
- 10:30-10:50 Break

10:50-11:20 The Application of Recombinant DNA Methods to Structure Studies of DNA  
Dr. James Wang (王 倬)  
Professor of Biochemistry and Molecular Biology, Harvard University

11:20-11:30 Discussion

11:30-12:00 Studies of Genome Organization by Electron Microscopy

Dr. Louise Tsi Chow (周 芷)  
Senior Staff Scientist  
Cold Spring Harbor Laboratory

12:00-12:10 Discussion

### AFTERNOON SESSION

#### *Cloning*

Chairmen: Dr. Shing Chang (張 欣)  
Dr. H.P. Wu (鄔宏藩)

13:30-14:00 Eukaryotic Promoter and Transcriptional Control

Dr. Ru-Chih C. Huang (黃周汝吉)  
Professor of Molecular Biology  
The Johns Hopkins University

14:00-14:10 Discussion

14:10-14:40 cDNA Cloning from Major and Minor Components of Cellular mRNA

Dr. Yuan Lin (林 遠)  
Senior Scientist  
Frederick Cancer Research Center

14:40-14:50 Discussion

14:50-15:10 Break

15:10-15:40 DNA Modification and Eukaryotic Gene Expression

Dr. James C.K. Shen (沈哲鯤)  
Department of Genetics, Assistant Professor  
University of California, Davis

15:40-15:50 Discussion

15:50-16:20 Characterization of a Plasmid-Filaments Phage Recombinant

Dr. T.Y. Chow (周德源)  
Academia Sinica

- 16:20-16:30 Discussion
- 16:30-17:00 Cloning of *E. coli* Isoleucyl-tRNA Synthetase Gene with Cosmid pHC 79.  
Dr. H. Tsai ( 蔡 新 )  
Gesellschaft für Biotechnologische Forschung  
3300 Braunschweig - Stöckheim, West Germany

17:00-17:10 Discussion

**JANUARY 12, 1982 (Tuesday)**

**MORNING SESSION**

***Expression***

Chairmen: Dr. J.Y. Lin ( 林榮耀 )  
Dr. Y.C. Su ( 蘇遠志 )

08:50-09:20 Expression of the Cloned P21 Transforming Gene(*ras*) of Harvey Murine Sarcoma Virus  
Dr. Thomas Y. Shih ( 施佑宗 )  
Senior Investigator, Laboratory of Tumor Virus  
Genetics, National Cancer Institute  
National Institute of Health

09:20-09:30 Discussion

09:30-10:00 Expression of Cloned Influenza Viral Gene in Primate Cells  
Dr. C.J. Lai ( 賴慶助 )  
Head, Molecular Viral Biology Section  
Laboratory of Infectious Diseases  
National Institute of Allergy and Infectious Diseases  
National Institute of Health

10:00-10:10 Discussion

10:10-10:30 Break

10:30-11:00 Transposable Elements and Gene Expression  
Dr. C.P. David Tu ( 涂振北 )  
Assistant Professor of Biochemistry  
The Pennsylvania State University

11:00-11:10 Discussion

11:10-11:40 Human T Cell Growth Factory: Biological Properties and Molecular Cloning  
Dr. Robert Ting ( 丁景耀 )  
Scientific Director  
Biotech Research Laboratory Inc.

11:40-11:50 Discussion

### AFTERNOON SESSION

#### *Potentials*

Chairmen: Dr. C.S. Yang ( 楊照雄 )  
Dr. T.C. Lin ( 林朝京 )

13:30-14:00 Expression of Eukaryotic Genus in *Bacillus Subtilis*  
Dr. Shing Chang ( 張欣 )  
Senior Scientist  
Cetus Corporation

14:00-14:10 Discussion

14:10-14:40 Expression of Cloned Hepatitis B Surface Antigen in Eukaryotic Cells  
Dr. C.C. Liu ( 留忠正 )  
Scientist  
Genentech Inc.

14:40-14:50 Discussion

14:50-15:10 Break

15:10-15:40 Hybridoma Technology: Theory, Methods, and Application.  
Dr. T.W. Chang ( 張子文 )  
Assistant Director  
Centocor Incorporated

15:40-15:50 Discussion

15:50-16:20 Summary Appraisal: Unlimited Genetics  
Dr. P.C. Huang ( 黃乘乾 )  
Professor of Biochemistry  
The Johns Hopkins University, School of Hygiene

16:20-16:30 Discussion

16:30-16:40 Closing Remarks  
Dr. T.T. Kuo ( 郭宗德 )  
Member, Academia Sinica