

# NATIONAL ACADEMY OF SCIENCES

COLLOQUIUM ON GENETICS AND THE ORIGIN OF SPECIES

30 JANUARY - 1 FEBRUARY, 1997

BECKMAN CENTER OF THE NATIONAL ACADEMIES OF SCIENCES AND ENGINEERING  
IRVINE, CALIFORNIA

**CO-ORGANIZERS:**

Francisco J. Ayala  
Walter M. Fitch  
Department of Ecology & Evolution  
University of California  
Irvine, CA 92697-2525

Tel: (714) 824-8294  
Fax: (714) 824-2474  
E-mail: FJAyala@uci.edu  
WFitch@uci.edu

November 4, 1996

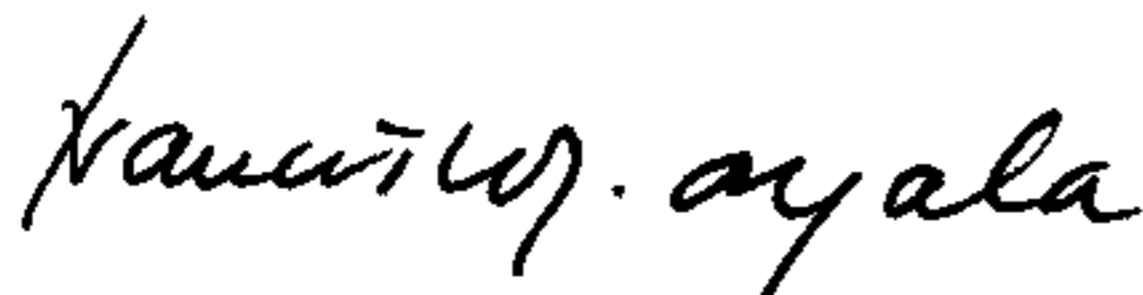
Dear Colleague:

This is to invite you to attend a colloquium on "Genetics and the Origin of Species," sponsored by the National Academy of Sciences. The Colloquium will be 30 January-1 February 1997, at the Beckman Center of the National Academies of Sciences and Engineering in Irvine, California. A preliminary program is enclosed.

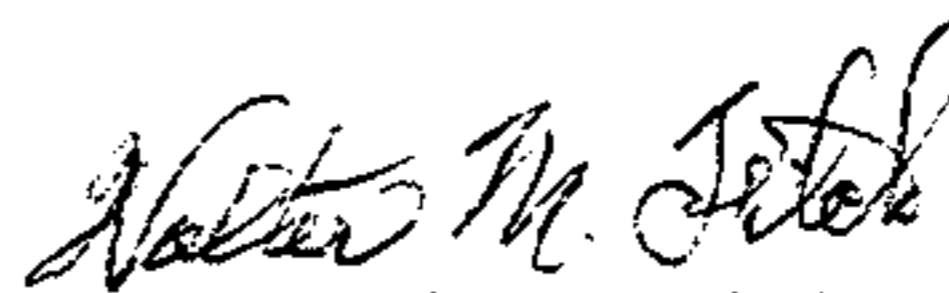
In 1937, Theodosius Dobzhansky published *Genetics and the Origin of Species*, which sought to integrate the rapid advances in genetics with Darwin's classic. The NAS Colloquium will commemorate the 60th anniversary of Dobzhansky's book with a broad-ranging examination of current evolutionary genetics issues.

Attendance at the symposium is by invitation only and limited to 250 registered individuals. To facilitate the participation of younger scientists, we request that you extend this invitation to interested graduate students and postdocs (you may duplicate for this purpose the enclosed registration form, which can also be shared with anyone else you think should be invited). The NAS has provided funds to make awards to supplement the expenses of participating graduate students and postdocs up to \$85 for hotel costs and \$100 for air travel. A maximum of 100 awards will be granted, with priority based exclusively on the order in which requests (accompanied by the registration fee) are received. Notification of the award will be made shortly after receiving the application but the awards will be paid **after** the Colloquium, upon documentation of qualifying expenses.

A registration form is enclosed. Registrations will be accepted only when the registration fee is included and in the order in which they are received. The registration fee is \$185, which includes the cost of meals, reception, and banquet. However, a **reduced registration fee of \$65** (also including meals, reception, and banquet) is available to those posting their registration by **December 14**. A block of hotel rooms at a discount rate (\$85 plus tax per day, single/double occupancy) has been reserved at the Hyatt Regency Irvine. A hotel registration form will be provided upon request; see enclosed Colloquium registration form. Transportation between the hotel and the Beckman Center will be provided free of charge at specified times.



Francisco J. Ayala  
Co-chair, organizing committee



Walter M. Fitch  
Co-chair, organizing committee

ENCL: Preliminary Program  
Registration Form

# NATIONAL ACADEMY OF SCIENCES

COLLOQUIUM ON GENETICS AND THE ORIGIN OF SPECIES

30 JANUARY - 1 FEBRUARY, 1997

BECKMAN CENTER OF THE NATIONAL ACADEMIES OF SCIENCES AND ENGINEERING  
IRVINE, CALIFORNIA

**CO-ORGANIZERS:**

Francisco J. Ayala  
Walter M. Fitch  
Department of Ecology & Evolution  
University of California  
Irvine, CA 92697-2525

Tel: (714) 824-8294  
Fax: (714) 824-2474  
E-mail: FJAyala@uci.edu  
WFitch@uci.edu

November 18, 1996

Name:

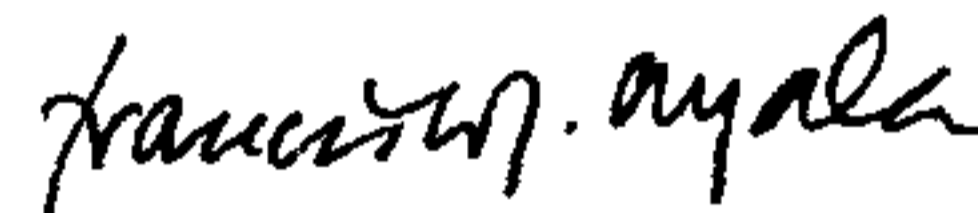
Jonathan Eisen

This is to confirm your registration to attend the National Academy of Sciences Colloquium on *Genetics and the Origin of Species*.

Enclosed is a registration form to reserve your room at the Hyatt Regency Irvine. At a later date you will receive the final program, where the shuttle schedule between the hotel and the Beckman Center will be printed.

We look forward to your participation in the Colloquium.

Sincerely yours,



Francisco J. Ayala  
Co-Chair, Organizing Committee

ENCL:

FJA:dbc

NATIONAL ACADEMY OF SCIENCES  
COLLOQUIUM ON GENETICS AND THE ORIGIN OF SPECIES  
30 JANUARY - 1 FEBRUARY, 1997  
BECKMAN CENTER OF THE NATIONAL ACADEMIES OF SCIENCES AND ENGINEERING  
IRVINE, CALIFORNIA

CO-ORGANIZERS:

Francisco J. Ayala  
Walter M. Fitch  
Department of Ecology & Evolution  
University of California  
Irvine, CA 92697-2525

Tel: (714) 824-8294  
Fax: (714) 824-2474  
E-mail: FJAyala@uci.edu  
WFitch@uci.edu


December 3, 1996

Dear: Jonathan A. Eisen:

I regret to inform you that we are unable to award you a supplementary subsidy for hotel and/or airfare to attend the NAS Colloquium on *Genetics and the Origin of Species*.

If you wish to register for the Colloquium without the subsidy awards you requested, please respond to me via fax: 714-824-2474; e-mail: fjayala@uci.edu, or telephone (714-824-8294), ASAP. If we do not receive your reply by **Friday, December 13**, your check will be returned to you.

Sincerely,

  
Denise B. Chilcote  
Administrative Asst.

:dbc

ZEBRA - Paqf M.U + El Camino - SPM  
415 853-3500 ] 2.99#

51370

Name Badges will be required for all functions.

(Badges will be distributed at the information table in the Atrium of the Beckman Center.)

**Thursday, January 30**

6:00 - 9:00 p.m. Welcome Reception.

**Friday, January 31**

7:30 a.m. Buffet Breakfast in Refectory.

9:00 a.m. - 1:00 p.m. **SESSION I. Genetic Variation and Its Origins**

9:00 *Introduction and Chairperson*

9:10 **Origin of Genes**

10:00 **Transposable Elements as Sources of**

**Variation in Animals and Plants**

10:50 **Break**

11:10 **Variation and Evolution of Influenza**

12:00 **Genes, Peoples, and Languages**

1:00 - 2:00 p.m. **Lunch in Refectory.**

2:00 - 6:00 p.m. **SESSION II. Adaptation and Natural Selection**

*Chairperson*

2:00 **Superoxide Dismutase (SOD):**

**An Unfolding Story of Natural Selection**

2:50 **Self-Incompatibility Alleles and Inferences**

**from Shared Polymorphisms**

3:40 **Break**

4:00 **Variation in the Regulation of an Allozyme**

**Locus in *Drosophila*: Adaptation or**

**Non-Darwinian Evolution?**

4:50 **Natural Selection and**

**"Genetics and the Origin of Species"**

**Friday Evening**

6:00 p.m. **Cocktails.**

7:00 p.m. **Dinner in the Atrium.**

8:15 p.m. *Introduction: John A. Moore (UC Riverside)*

*Banquet Lecture: Richard C. Lewontin (Harvard)*

**Is Population Genetics an Experimental Science?**

**Saturday, February 1**

7:00 a.m. Buffet Breakfast in Refectory.

8:30 a.m. - 12:30 p.m. **SESSION III. Population Differentiation and Speciation**

*Chairperson*

8:30 **Phylogenetics and the Origin of Species**

9:20 **Sperm and Ejaculate Differentiation**

**and Reproductive Isolation**

10:10 **Break**

10:30 **Incipient Speciation in Salamanders**

11:20 **Genetics and the Origin of Bird Species**

12:30 - 1:30 p.m. **Lunch in Refectory.**

1:30 - 5:30 p.m. **SESSION IV: Patterns of Evolution**

*Chairperson*

1:30 **Vagaries of the Molecular Clock**

2:20 **Evolution of Codon Usage Bias in *Drosophila***

3:10 **Break**

3:30 **Nuclear Gene Evolution in Plants**

4:20 **Variation and Evolution of MHC**

**and Immunoglobulin Genes**

*Francisco J. Ayala (UC Irvine)*

*Walter Gilbert (Harvard)*

*Margaret G. Kidwell (U Arizona)*

*Walter M. Fitch (UC Irvine)*

*L.L. Cavalli-Sforza (Stanford)*

*Lee Ehrman (SUNY Purchase)*

*Richard R. Hudson (UC Irvine)*

*Andrew G. Clark (Penn State)*

*Rollin C. Richmond (SUNY Stony Brook)*

*Wyatt W. Anderson (U Georgia)*

*Bruce Wallace (VA Polytechnic Inst.)*

*John C. Avise (U Georgia)*

*Therese Ann Markow (Arizona State)*

*David Wake (UC Berkeley)*

*Peter R. Grant (Princeton)*

*Walter M. Fitch (UC Irvine)*

*Francisco J. Ayala (UC Irvine)*

*Jeffrey R. Powell (Yale)*

*Michael T. Clegg (UC Riverside)*

*Masatoshi Nei (Penn State)*