

PROGRAM SUMMARY

MONDAY, AUGUST 19

Retreat

TUESDAY, AUGUST 20

- 8:30 a.m. Morning Devotions
- 9:00 a.m. Registration
- 2:00 p.m. Social Science Commission
- 3:15 p.m. Psychology Commission
- 4:15 p.m. Physical Science Commission (Part I)
- 8:15 p.m. Chorale Concert

WEDNESDAY, AUGUST 21

- 8:30 a.m. Morning Devotions
- 9:00 a.m. Biological Sciences Commission
- 2:00 p.m. ASA Dialogue
- 8:00 p.m. Public Address
- 10:00 p.m. Evening Devotions

THURSDAY, AUGUST 22

- 8:30 a.m. Morning Devotions
- 9:00 a.m. Science Commission
- 10:30 a.m. Business Meeting
- 1:00 p.m. Field Trips
- 7:00 p.m. Banquet
- 8:00 p.m. Keynote Address

FRIDAY, AUGUST 23

- 8:30 a.m. Morning Devotions
- 9:00 a.m. Physical Sciences Commission (Part II)
- 11:00 a.m. Adjournment

*Please note Registration  
Confirmation on last  
page - H.R.*

OFFICIAL PROGRAM *W. FRAIR*

*Twenty-third Annual  
Convention*

OF THE  
**AMERICAN SCIENTIFIC  
AFFILIATION**

(INCORPORATED)

A group of Christian scientific men, devoting themselves to the task of reviewing, preparing and distributing information on the authenticity, historicity, and scientific aspects of the Holy Scriptures in order that the faith of many in Jesus Christ may be firmly established

**AUGUST 20 - 23, 1968**

**CALVIN COLLEGE, KNOLLCREST CAMPUS  
Burton Street & East Belt Line Dr.  
GRAND RAPIDS, MICHIGAN**

## GENERAL CONVENTION INFORMATION

Calvin College was founded in 1876 and began development of the new Knollcrest Campus site in 1961. The college is supported by the Christian Reformed Church and welcomes the ASA Convention to its Knollcrest Campus for its 23rd Annual National Convention.

Conferees will be housed at the Schultze-Eldersveld Halls on the Calvin Knollcrest Campus from Sunday evening, August 18 until Friday afternoon, August 23. Meals will be available in the nearby Student Commons Dining Hall on the conference days (August 20-23).

Registration will be in the west foyer of the Fine Arts Center on the Knollcrest Campus. Meetings will be held in the Auditorium of the Fine Arts Center.

The Convention registration fee is \$4.00 for the entire week, \$2.00 for students, and \$2.00 for single day registration.

Housing costs are \$5.00 daily for one person in a room and \$8.00 daily for two persons in a room. Bath in each case is shared with the adjacent room.

Meals are served cafeteria style in the Knollcrest Commons. The first meal will be served at breakfast Tuesday, August 20 at 7:30 a.m. and the last will be lunch on Friday, August 23. Cost for eleven meals, including the banquet, is \$14.00. All those living on campus are expected to eat on campus. Those who may be living off campus may join us for meals at the rate of \$1.00 for breakfast, \$1.50 for lunch, \$2.00 for dinner, and \$3.00 for the banquet. Children under 12 years of age will be charged half-rate for food and regular rate for housing. A \$2.25 fee for refreshments for nine coffee breaks will be charged those who wish to "indulge".

The Knollcrest Campus is located on the eastern edge of Grand Rapids on State Route 44, 1/4 miles north of State Route M11. Registration is at the Fine Arts Center, which is the first building you approach as you turn off Route 44 (inside the circular parking lot).

From the east: Leave I-96 at M11 exit, proceed west on M11 then north on M44 to Calvin.

From the south or west: Either come across town (east) on M11 then north on M44, or take I-96 or I-196 east to M44, then south to Calvin.

From the north: Take U. S. 131 south to junction with M44, then M44 south to Calvin.

Please mail in the attached reservation information as early as possible. No advance deposit is required.

Off-campus lodging is available at the following motels:

AVON PARK MOTEL  
3955 28th St. S. E.  
Call 949-3760

SHANGRI-LA MOTEL  
2691 E. Belt Line S.E.  
Call 949-1700

CASCADE MOTOR INN  
Corner 28th St. and  
E. Belt Line S.E.  
Call 949-1850

GATEWAY MOTEL  
2856 28th St. S.E.  
Call 949-5450

## RETREAT

### MONDAY, AUGUST 19, 1968

- 9 a.m. Devotions and Prayer
- 9:30 - 11 a.m. Purposes of the ASA  
"Why Should the ASA Do Anything?"
- 11:00 - 12 a.m. General Program of the ASA  
"What Should the ASA Do to Fulfill Its Purposes?"
- 2 - 3 p.m. Publication Policy and Program
- 3 - 4 p.m. Cooperating Endeavors Between the ASA and Other Groups
- 4 - 5 p.m. Suggestions for Supplemental Financing and Summary

Meals not available on campus until Tuesday Breakfast. Facilities at nearby eating places.

Housing will be provided starting Sunday, August 18.

### TUESDAY, AUGUST 20, 1968

- 7:30 a.m. Breakfast
- 8:30 a.m. Morning Worship — Fine Arts Auditorium
- 9:00 a.m. Registration in the west foyer of the Fine Arts Center  
Meetings of **Boards, Commission, Council**
- 10:00 a.m. Coffee Break
- 11:30 a.m. Adjourn
- 12:00 Lunch

#### SOCIAL SCIENCE COMMISSION

- 2:00 p.m. "Religious Perspectives of Students and Their Opinions About the Impact of Science and Education on the Church"—David O. Moberg, Bethel College, St. Paul, Minn.
- 2:40 p.m. "Teacher's Dilemma"—Marie H. Berg, Metropolitan State Junior College, Minneapolis, Minn.
- 3:00 p.m. Coffee Break

#### PSYCHOLOGY COMMISSION

- 3:15 p.m. "Rorschach African Leper Protocols"—George R. Horner and Gerald D. Hilyard, Eastern Nazarene College, Wollaston Park, Quincy, Mass.
- 3:45 p.m. "Chromosomes and Human Behavior" — V. Elving Anderson, U. of Minn., Minneapolis, Minn.

#### PHYSICAL SCIENCES COMMISSION (Part I)

- 4:15 p.m. "Cosmology, Radioactive Halos, and the Age of the Earth"—Robert V. Gentry, Columbia Union College, Takoma Park, Md.
- 5:00 p.m. Adjourn
- 6:00 p.m. Dinner
- 8:15 p.m. Concert by Grand Rapids Summer Chorale.  
Director: Bradley Bloom, University of Michigan  
Fine Arts Center Auditorium
- 9:30 p.m. Coffee

WEDNESDAY, AUGUST 21, 1968

- 7:30 a.m. Breakfast
- 8:30 a.m. Morning Worship (with Church Music Conference) Seminary Chapel

BIOLOGICAL SCIENCES COMMISSION

- 9:00 a.m. *open on a humble devotion*  
Kornberg, Viruses and the Creation of Life" — Duane T. Gish, the Upjohn Company, Kalamazoo, Michigan.
- 9:30 a.m. Panel Discussion of Lynn White's paper "The Historical Roots of our Ecological Crisis", *Science*, 155, 1203 (1967).  
Chm: Wayne Frair, The King's College, Briarcliff, N.Y. Ernest Feenstra, the Upjohn Co., Kalamazoo, Mich. Donald Munro, Houghton College, Houghton, N. Y. Frank Cassel, N. Dakota State Univ., Fargo, N. D.

10:15 a.m. Coffee Break

10:30 a.m. Panel continuation

11:30 a.m. Adjourn

12:00 Lunch

2:00 p.m. *1300*  
*ASA Dialogue with Dr. William G. Pollard, Executive Director, Oak Ridge Associated Universities. The Christian Man of Science: What is his most important task today? How can the ASA help?*

3:00 p.m. Coffee Break

3:15 p.m. Dialogue continuation

5:00 p.m. Adjourn

6:00 p.m. Dinner

8:00 pm. **Public Address:** "Man on a Spaceship"—Professor William G. Pollard, Executive Director, Oak Ridge Associated Universities. Fine Arts Auditorium

9:30 p.m. Coffee

10:00 p.m. Evening Worship (with Church Music Conference) Seminary Chapel

THURSDAY, AUGUST 22, 1968

- 7:30 a.m. Breakfast
- 8:30 a.m. Morning Worship (with Church Music Conference) Seminary Chapel

HISTORY AND PHILOSOPHY OF SCIENCE COMMISSION

- 9:00 a.m. "Theological Implications of Life in Space" — Rodney W. Johnson, Office of Manned Space Flight, NASA, Washington, D. C.
- 9:40 a.m. "The Historicity of Genesis 1-3"—David E. Holwerda, Calvin College, Grand Rapids, Mich.
- 10:15 a.m. Coffee Break
- 10:30 a.m. **ASA Business Meeting**
- 11:30 a.m. Adjourn
- 12:00 Lunch

*Pat 1130*

- 1:00 p.m. **Field Trips** — (choose only one)  
A. ~~Leah-Siegler Laboratories~~ *Leah-Siegler Laboratories*  
B. Pine Rest Sanitarium  
C. Kalamazoo Nature Center  
D. The Upjohn Pharmaceutical Plant

7:00 p.m. **Banquet**

8:00 p.m. **Keynote Address** — "Christian Responsibilities in Science" — Richard H. Bube, ASA President, Stanford University, Stanford, California

9:30 p.m. Coffee

10:00 p.m. Evening Worship (with Church Music Conference) Seminary Chapel

FRIDAY, AUGUST 23, 1968

7:30 a.m. Breakfast

8:30 a.m. Morning Worship (with Church Music Conference) Seminary Chapel

PHYSICAL SCIENCES COMMISSION (Part II)

9:00 a.m. "Research, A Key to Renewal?" — Edward R. Dayton, Director, Missions Advanced Research and Communications (MARC), Monrovia, Calif.

10:00 a.m. Coffee Break

10:15 a.m. "Extraterrestrial Life? A Biblical Scientific View" James W. Reid, General Electric Company, Norristown, Pa.

11:00 a.m. Adjourn

12:00 Lunch

ASA CONVENTION CLOSES

ABSTRACTS OF PAPERS

STUDENTS' RELIGION AND PERSPECTIVE ON THE IMPACT OF SCIENCE ON THE CHURCH

David O. Moberg

Bethel College, St. Paul, Minnesota

Theologically conservative Christians traditionally have believed that there is an antagonism between sound religious doctrine and modern science and education. It is not our purpose here to survey the many variations within that viewpoint nor to summarize the evidence that the increasingly predominant perspective among evangelicals is that there is no inherent conflict between scientific discoveries and Christian faith. (There most common current view appears to be that the apparent contradictions are a result of theorizing and other analyses of empirical facts by scientists or interpretations by theologians of the revelation of God in the Bible.) Instead we shall examine some empirical data from a study of students which includes relationships between expressed attitudes on items related to the "science-religion conflict."

## TEACHERS' DILEMMA

Marie H. Berg

Metropolitan State Junior College, Minneapolis, Minn.

When fashioning ones teaching commitment according to James 3, 1-5 how do we answer a question like "Do you believe in collective bargaining for teacher salaries?"

How do we face our colleagues who resent our efforts in "unpaid overtime", who regard teaching as just another job? Will we resent students, who take undue advantage of us?

## RORSCHACH PROTOCOLS OF AFRICAN LEPERS

George R. Horner and Gerald D. Hilyard

Eastern Nazarene College, Wollaston Park, Quincy, Mass.

In 1952-1953 Rorschach protocols were obtained from twenty-two randomly selected lepers in two colonies in the Federated Republic of Cameroun, West-central equatorial Africa. Administration of the Rorschach was done by the senior author, George R. Horner.

Although the lepers were from different societies, Bulu, Ntum, and Fang; all shared a similar tropical rain-forest environment, culture and related language. Of the leper colonies, Ndjazeng is the oldest (1912) and has the largest population (1800). The central colony, Elat, the second from which protocols were obtained is an addition to the main hospital at Enogal. Both were under the supervision of the African Mission of the United Presbyterian Church, USA.

Previous studies (Abel and Hsu, 1941; Bleuler and Bleuler, 1935) have demonstrated the impact of culture on various aspects of performance on the Rorschach technique of personality assessment. These Rorschach protocols obtained from African lepers represents a further source of data on cross-cultural effects.

The protocols have been administered and scored according to the Klopfer method (1954) and therefore interpretation of the profile will be derived from Klopfer's technique. Location, determinants, content, and relative incidence of populars and originals will be presented in an attempt to investigate the cross-cultural differences that may emerge from an evaluation of these protocols.

Thanks is in order to Dr. Marius Van Weele, Leprologist, who entertained me while working at the main colony at Ndjazeng.

## REFERENCES

- Abel, Theodora M., and Hsu, Francis. Some aspects of personality of Chinese as revealed by the Rorschach Test. *J of Project. Tech.*, 13,285-301, 1949.
- Bleuler, M and R. Rorschach's Ink-Blot Test and racial psychology: mental peculiarity of Moroccans, *Character and Personality*, 4, 97-114, 1935.
- Klopfer, Bruno et al. *Developments in the Rorschach Technique*. New York: Harcourt, Brace and World, Inc., 1954.

## CHROMOSOMES AND HUMAN BEHAVIOR

Y. Elving Anderson

Professor of Genetics, University of Minnesota

Recent evidence suggests that males with an extra Y chromosome tend to show aggressive and anti-social behavior and to commit criminal acts. Further research is essential to verify the presumed causal relationship, but we can explore some of the implications: What should parents and teachers be told? Would specific treatment reduce the behavior problems? How are views of personal responsibility affected?

## COSMOLOGY, RADIOACTIVE HALOS, AND THE AGE OF THE EARTH

Robert V. Gentry

Columbia Union College, Takoma Park, Md.

The ring structure of uranium and thorium halos has usually been interpreted to imply that radioactive transformation rates have remained invariant over geological time. However, this interpretation does not necessarily follow from the analysis of the halo ring radii. It is possible that very large changes in the transformation rates could have occurred without being detected by previous analyses.

In addition, certain other types of radioactive halos, termed variant halos because their ring structure does not fit that of the uranium and thorium halos, have been observed in many Precambrian biotites. The radioactive parent nuclides of these variant halos in many cases represent relatively short half-life radioactivity. Investigation shows that the radioactivity which produced the variant halos is extinct, natural radioactivity and thus should define the maximum time period between "nucleosynthesis" and formation of the crustal rocks. It is suggested that creation by fiat should be considered as a valid cosmological model.

## KORNBERG, VIRUSES AND THE CREATION OF LIFE

Duane T. Gish

The Upjohn Company, Kalamazoo, Michigan

Late in 1967 at an elaborate press conference, Kornberg, Goulian and Sinsheimer announced that biologically active viral DNA had been replicated in a test tube. Although Kornberg was careful in describing exactly what had been accomplished, published reports in the press were distorted and unwarranted implications were drawn from the results. It will be pointed out that nothing was really created because the product obtained was one of the necessary starting materials, nor was a virus synthesized but only viral DNA was replicated. It will also be pointed out that it cannot be said that the viral DNA replicated itself because, according to the simplest nucleic doctrine, DNA plays no active role in its own replication other than furnishing a pattern. Furthermore, the vital protein coat of the virus was not produced. Introduction of viral DNA into bacterial cells was required for production of complete viruses.

Kornberg was quoted as saying that, with reservations, he had created a primitive form of life. The structure and function of viruses will be compared to the least requirements for a primeval organism as suggested, for instance, by Lederberg, and it will be pointed out that such a simple model far exceeds in complexity that required for viral DNA replication.

## MAN ON A SPACESHIP

Professor William G. Pollard

Executive Director, Oak Ridge Associated Universities

Man rides through space on a beautifully designed spaceship called "earth", and after some 35,000 years of trial and error has developed the technology to actually fulfill the Genesis revelation of man's destiny to "subdue the earth".

Our atmosphere serves as an ideal radiation shield, transparent to light, but effectively protecting us from the fierce ultra-violet, x-rays, and higher energy radiations of outer space. During its long prehuman history, the earth has been prepared with a wealth of supplies now required by man, when he has filled the earth and subdued it, to carry him on his long journey through space from now on.

It seems providential that man should have stumbled on the secrets of controlled nuclear energy at this critical period in history when the demand for vast new supplies of energy and fresh water are essential to the survival of an exploding world population. With a spaceship crew of over 6 billion people 32 short years from now, the world will be just twice as crowded as it is now. The tragedy of the present, critical decade is that we do not have time enough to carry out the immense engineering projects required before famine on a catastrophic scale will be upon us. The technological, economic, social, and political adjustments which would be necessary to just add the required 20 billion gallons of additional fresh water per day every year for the remaining third of this century are simply not in sight.

The problems of energy, water, food, and waste handling arise from the explosive increase in human population now occurring, and the problem of achieving a stable human population on the planet dwarfs all others in both urgency and difficulty.

A parallel problem faced by those occupying spaceship "Earth" is that of unity in the crew, and it is inevitable that we must ultimately reach a state of balance with respect to ideology, power and wealth.

POLLARD. DR. WILLIAM G., b. Batavia, N.Y., April 6, 11; m. 32; c. 4. PHYSICS. B.A. Tennessee, 32; fel. Rice, 32-35, M.A. 34, Ph.D. (physics), 35; hon. D.Sc. Ripon Col, 51; Univ of South, 52; Kalamazoo Col, 55; hon D.D., Hobart Col, 56; Grinnell Col, 57; LL.D. Chattanooga, 58; Kenyon Col, 64; hon.. L.H.D., Keuka Col, 62, Long Island, 65. Asst. physics Rice, 35-36; asst. prof, Tennessee, 36-41, assoc. prof, 41-43, prof, 43-44, 45-47; res. scientist. s.a.m. lab, Columbia, 44-45; acting exec. dir. OAK RIDGE ASOC. UNIVS, 47, EXEC. DIR, 47- Mem. fels. selection cmt. physics, Fulbright Found, 56-58. Consult, Chicopee Mfg. Corp, Mass, 42-44; Carbide and Carbon Chem. Corp, Tenn, 46-49; Monsanto Co, 46-48. Medal, Rice Univ. 62. AAAS; fel. Phys. Soc; fel. Nuclear Soc. Cosmic rays; theory of beta ray spectra; forces responsible for gas adsorption; electrostatic control of small particles; kinetic theory of gas flow; theory of diffraction of neutrons by crystals; heat conductivity of liquid helium II.

#### THEOLOGICAL IMPLICATIONS OF LIFE IN SPACE

Rodney W. Johnson

Office of Manned Space Flight, NASA, Washington, D. C.

This is the third in a series of papers treating the general subject of the relationship between the space program and theological beliefs.

The first paper (1) developed the viewpoint that there might well be a spiritual motivation to space ventures, citing in particular, the lunar program. In the second paper (2) the relationship between the historic position of the scientist and the theologian was examined and concluded that the views of these two groups are tending to merge as a result of space-induced research, development and discovery.

In this paper, these views will be extended to examine the specific question the impact of the discovery of extra-terrestrial life might have on our theological beliefs.

Extraterrestrial life is thought of as a system of chemical reactions that possess the inherent capability of self-perpetuation, of response to environmental conditions and of transforming energy from one form to another. Any consideration of life in space must be related to both familiar forms of life and unfamiliar forms of life. The theological question pertaining to the impact of life in space on a given culture will be different for each of these two conditions. This paper

proposes to discuss this question from the standpoint of both familiar and unfamiliar forms of life and the impact of these discoveries on a culture which may or may not reflect theological belief to begin with. Major conclusions of the paper will examine how theological beliefs may be reinforced or eroded by the discovery of ET life. Underlying the interest in extra-terrestrial life may be an uncertainty on the part of man regarding his existence in the Universe; this may prove to be a primary motivation for the space exploration program.

(1) "On the Manned Lunar Landing," *ASA Journal*, December, 1965.

(2) "Science and Religion in Space Exploration," *ASA Journal*, June, 1967.

#### THE HISTORICITY OF GENESIS 1 - 3

David E. Holwerda

Calvin College, Grand Rapids, Michigan

The article attempts to develop a hermeneutical approach for the first chapters of Genesis. Involved in this attempt is a discussion concerning the sources of the biblical material. The theory of a continuous oral tradition is rejected, as well as the theory that Israel borrowed myths from the ancient world and historicized them. Instead an approach designated as "prophetic history" is used, which borrows its basic insight from biblical prophecy, i.e. the prophet borrows concepts and symbols from the world in which he lives. Hence the first chapters of Genesis are related to viewpoints held in the ancient world, although this relationship is mainly polemical in nature.

When one appreciates this time-conditioned nature of revelation, that revelation is expressed in terms of and in reaction to cultural forms experienced by historical Israel, the significance of Genesis 1 for science appears to be something like the following: Genesis rejects any theory that incorporates within it a naturalistic, materialistic, or non-theological view of reality as a whole. For all such theories reject creation, providence, and purpose in creation, make of nature and natural processes some kind of ultimate, interpret man as someone other than the image-bearer of God, and consequently reject the biblical understanding of sin. Apart from such concerns, which are not strictly scientific, science is free.

#### CHRISTIAN RESPONSIBILITIES IN SCIENCE

Richard H. Bube

Departments of Materials Science and Electrical Engineering  
Stanford University, Stanford, California

A Christian active in science has responsibilities that are peculiarly his because of his commitment to Jesus Christ, and through Him, to the scientific investigation of the natural world. These responsibilities lie in the areas of (1) philosophy, or motivation and purpose; (2) practice, or professional and personal integrity; and (3) service, or social and political concern. Questions that must be faced include the following. Is the scientist called to understand or only to control? How is the support of science related to the potentialities or purely practical results? Can science be properly used apologetically in Christianity? When can a Christian scientist be sure of? What is the scientist's responsibility in view of likely applications of his work? Is the development and support of science a necessary application of Christian biblical principles to a world of need and suffering? Some suggestions for answers are offered—but the significant answers will be those provided by the interacting scientific and Christian communities. The ASA belongs in the center of this interaction.

## RESEARCH, A KEY TO RENEWAL?

Edward R. Dayton

Director, MARC, Monrovia, California

This is a day of tremendous change and innovation, new ideas, new capability. In this day Christian men are recognizing that God gives each generation the tools to do the job that He requires of them.

The American church has been slow to use the tools of **applied** research. They have been even slower to use a systems approach to the total task of world evangelism.

Europeans have led in the area of research. There are religious centers all over Europe, Africa, and Asia. In addition there are now a number of applied research centers all over the world. The Roman Catholics have led the way, but have been slow to combine American management methods with research. However, CARA (Center for Applied Research in the Apostolate) in Washington, is the leading U. S. Catholic organization now using this approach. The Unit of Research in Nairobi, Kenya, is quite similar to the American Missions Advanced Research and Communications Center (MARC).

Some typical programs of MARC include: an in-depth information study in Brazil; a number of probes into the use of management and computer systems by the American church; a motivation/interest survey of the 9200 delegates to the IVCF triennial Mission Conference at Urbana; compilation of a computerized data bank of the church worldwide; a study of total Christian strategy in the context of a world situation room.

What is now needed is a worldwide network and on-going research.

The business and scientific community needs to pool its resources and to apply its skills to the task of giving all men an opportunity to say yes to Jesus Christ.

## EXTRATERRESTRIAL LIFE? A BIBLICAL-SCIENTIFIC VIEW

J. W. Reid

General Electric Company, Norristown, Pa.

Recent developments are reviewed to show that, 1.) The chances of finding life in the Solar System are poor. 2.) That the search for other planetary systems has uncovered enough evidence to clearly show that they exist. 3.) That probability statistics lead to the conclusion that there are over one hundred million inhabitable planets.

The probability of life in space is then accepted as a challenge to Christians and various passages of the Bible on the subject are reviewed. These lead to the conclusion that finding extraterrestrial life, 1.) Will not be any more of a blow than Columbus' discovery of natives on the shores of the New World. 2.) That again truth will only support Truth, just as Galileo argued. 3.) That this is an opportunity for ASA to "affirm clearly the validity of scientific endeavor in understanding the natural world" (Dr. Bube) on biblical, as well as scientific grounds, before rather than after the fact.

## CALVIN COLLEGE CONFERENCE ON CHURCH MUSIC

The Seventh Conference on Church Music will run concurrently with the ASA Convention on the Calvin College Campus. ASA registrants and their families will be privileged to attend a choral concert Tuesday evening and to worship with the church musicians at morning and evening worship. For those remaining in Grand Rapids after the close of the ASA Convention Friday noon, there will be a Hymn Festival Friday evening at 8:15 p.m.

The Conference emphasis this year is on hymnody and works for organ and voices; the programs on Thursday and Friday will feature compositions based on hymn melodies.

Copies of the complete conference program are available on request. The cost of the full conference is \$30.00 with a \$5.00 advance deposit. Admission to individual sessions of the Music Conference cost \$2.50 each.

## THE OBJECTS OF THE AMERICAN SCIENTIFIC AFFILIATION:

- "(1) To integrate and organize the efforts of many individuals desiring to correlate the facts of science and the Holy Scriptures.
- (2) To promote and encourage the study of the relationship between the facts of science and the Holy Scriptures.
- (3) To promote the dissemination of the results of such studies."

—Article I of ASA Constitution

Each candidate for membership in the ASA must sign the following statement:

"I believe the whole Bible as originally given to be the inspired word of God, the only unerring guide of faith and conduct. Since God is the Author of this Book, as well as the Creator and Sustainer of the physical world about us, I believe there can be no discrepancies when both are properly interpreted. Accordingly, trusting in the Lord Jesus Christ, the Son of God, my Saviour, for strength, I pledge myself as a member of this organization to the furtherance of its task.

Signed .....

—Article II of ASA Constitution

## NOTES

E. Anderson

1956 1st chromosome study  
now 120 newborns have chromo. abnor  
XO Turner's syndrome 2-3 to <sup>New</sup> 10,000  
XXY - Down's " 20 / 10,000  
XXYY  
XXY - 1962 discovered  $\frac{1}{10}$  } 300 / 10,000

also hi "2" XYY  $\frac{1}{9}$   
no physical abnormalities  
limited capacity for affection  
Some XYY apparently normal  
five hi caffeine ( $\frac{1}{2}$  LD) & get abnormal  
behavior.

## ASA CONFERENCE PERSONNEL

General Chairman: H. Harold Hartzler  
Program Chairman: Robert L. Bohon  
Arrangements Chairman: Martin Karsten  
Publicity: Mrs. Anne Deckard  
Field Trips: Ronald Constant  
Book Display: John Baker

### Commission Chairmen:

Biological Science — Wilbur Bullock  
History and Philosophy of Science — Peter Pav  
Physical Science — Robert L. Bohon  
Psychology — Paul Barkman  
Social Science — George Horner

## REGISTRATION AND HOUSING

Mr. Henry Bengelink  
Calvin College  
1331 Franklin Street S.E.  
Grand Rapids, Michigan 49506  
(616) 245-9006

## LOCAL SERVICES AND TRANSPORTATION

Dr. Herman Broene  
1411 Rossman Avenue S.E.  
Grand Rapids, Michigan 49507  
(616) 452-5600