



## George Vineyard Chosen Director By AUI Board of Trustees

George H. Vineyard, Deputy Director of Brookhaven National Laboratory since 1967, was chosen to become Laboratory Director effective January 15, 1973.

Dr. Vineyard, fourth in a line of distinguished scientists to head Brookhaven since its start in 1946, succeeds Dr. Maurice Goldhaber.

Dr. Goldhaber expressed his wish to return to full-time research in July, 1972, at which time the AUI Board of Trustees requested President Gerald F. Tape to recommend a successor. He was to be assisted by two Committees to be designated by him - a special committee of Trustees, which he would chair, and an Advisory Committee from the Laboratory. To the Committee of Trustees he appointed C.K. Bockelman, A.W. Kimball, F.A. Long, A.K. Mann, and L.B. Thompson.

In August, Dr. Tape selected the Laboratory Advisory Committee. Dr. Gerhart Friedlander, Chemistry Department Chairman, was designated Chairman of the Committee whose other members were H.L. Atkins, G. Hind, B. Manowitz, V.R. O'Leary, N.P. Samios, J. Spiro, J. Weneser, and W.J. Willis representing the user community.

The Committee was asked to advise on criteria for selection and to recommend qualified candidates for further consideration by the President and the special committee of the Trustees. During the course of its deliberations, the Advisory Committee considered more than 100 suggested names.

At the conclusion of the search, which included joint meetings between the two committees, the Board of Trustees, at a special meeting in mid-December confirmed Dr. Tape's recommendation of Dr. Vineyard.

In announcing Dr. Vineyard's appointment, AUI President Tape said, "Dr. Vineyard brings to the Directorship a unique combination of talents. He is an eminent scientist, a man of extensive interests and understanding in many fields of science, and an administrator of demonstrated capability.

"We are impressed with Brookhaven's potential to contribute significantly to meeting the Nation's science and technology objectives. We are cognizant of the magnitude of the task of implementation and fully recognize the important role played by the Director. The Trustees and I look forward to working with Dr. Vineyard."

After his appointment was made public, Dr. Vineyard said, "In the 26 years since it was founded, Brookhaven National Laboratory has become one of the world's great laboratories. Opportunities for further dramatic advances in pure and applied science are as great now as they were in the Laboratory's beginning. With its highly qualified and dedicated staff and its extensive facilities BNL is in a powerful position to develop these opportunities. I believe it to be in the national interest, and consistent with a farsighted view of national priorities, for this development to be encouraged, even though other needs are in strong competition for funds. I am highly honored by this appointment and intend to do my utmost to see that BNL continues to hold its position of leadership."

In an interview with a local paper, Dr. Vineyard also said that the Laboratory will maintain its emphasis on high energy physics and will continue to work for the development of a sophisticated intersecting storage accelerator.

## Maurice Goldhaber Appointed AUI Distinguished Scientist

At its December 15 meeting in Washington, D.C., the Board of Trustees of Associated Universities, Inc., conferred upon retiring Director Maurice Goldhaber, as he returns to research, the title of AUI Distinguished Scientist.

AUI President Gerald F. Tape said, "In recognizing Dr. Goldhaber's eminence as a world-renowned scientist and his broad interests in and contributions to many fields of science, the Board of Trustees of Associated Universities, Inc. has deemed it appropriate to convey upon him the title of 'AUI Distinguished Scientist.'"

In establishing this title, Dr. Tape noted that it has its parallel in the name of "University Professorships" or similar positions which exist at many institutions.

Dr. Goldhaber was born in Lemberg, Austria in 1911. He began his physics education at the University of Berlin, from which he went to the Cavendish Laboratory at Cambridge University, England, where he received his Ph.D. in Physics in 1936. In 1938 he came to the United States as a faculty member of the University of Illinois, where he remained until 1950 when he joined the Physics Department at Brookhaven National Laboratory. He served as Chairman of the Physics Department in 1960-61, and in July, 1961, was appointed Director of Brookhaven National Laboratory.

At BNL, Dr. Goldhaber has specialized in the study of nuclear isomers and fundamental particles. Research accomplishments by him and his colleagues at BNL have included the establishment of the fact that the elusive neutrino has a left-handed spin. Many of his early discoveries on photo-disintegration and slow neutrons have formed the basis for much of modern physics and reactor science and technology. He is a Fellow of the American Physical Society and a Member of the National Academy of Science, the American Academy of Arts and Science, and the American Philosophical Society. In 1971 he received the Tom W. Bonner Award of the American Physical Society. The citation reads as follows: "For his many ideas and discoveries, spanning the field of nuclear physics that have played vital roles in establishing the nature of nuclei, the electromagnetic interactions with nuclei, the weak interactions, and the validity of the conservation laws central to all physics."

Dr. Goldhaber and his wife Gertrude, who is also a physicist at Brookhaven, reside in Bayport. They have two sons, Alfred S., a faculty member at the State University of New York, Stony Brook, and Michael H., a faculty member at the University of Arizona.

### BNL's Past Directors

Dr. Goldhaber was the third Director to serve Brookhaven since its founding after the end of World War II.

On September 1, 1946, the first Director, Dr. Philip M. Morse of M.I.T., was appointed. Dr. Morse, a physicist, came to Brookhaven following brilliant war-time service with the Office of Scientific Research and Development. His important contribution to BNL was to launch the ship. On July 16, 1948, Dr. Morse took leave of absence, and his resignation became effective September 30.

Dr. Morse is presently Professor Emeritus of Physics at M.I.T. and President of the American Physical Society.

Dr. Leland Haworth, also a physicist, was Brookhaven's second Director. In 1947 he came to the Laboratory from the University of Illinois; like many others on the



On January 15, 1973, Dr. George Vineyard (left) will become Director of Brookhaven National Laboratory. Dr. Maurice Goldhaber (right) will return to full time research at Brookhaven with the title of AUI Distinguished Scientist.

Right now, Vineyard said, he has to "straighten out my own approach to the job" and assess the responsibilities. Although he has served as deputy director, now, he said, "the buck stops with me."

At the same meeting that Dr. Vineyard's appointment was confirmed, the AUI Board adopted a new policy in connection with the tenure of directors. Although the Director will continue to serve at the pleasure of the Board, a term-type appointment has been instituted. The objective is to establish for each newly appointed director a future date when the Board and he will mutually determine the desirability of the Director's continued service. The Board

has established six years for the initial term; the length of term for reappointment is left open since it will be dependent upon factors prevailing at that time.

Dr. Vineyard joined BNL as a physicist in 1954, and became Chairman of the Physics Department in 1961. In 1966, he was appointed Associate Director of BNL, and on July 1, 1967 Deputy Director.

Dr. Vineyard was born in St. Joseph, Missouri in 1920. He received his B.S. and Ph.D. in Physics from the Massachusetts Institute of Technology, the latter in 1943. He then spent three years at the MIT Radiation Laboratory, after which he

(Continued on page 2)



First Director, Dr. Philip M. Morse, served until September 30, 1948.



Dr. Leland J. Haworth became the second Director and served until April, 1961.

Dr. Gerald F. Tape functioned as Acting Director until July 1961 when Dr. Maurice Goldhaber was appointed.

**Cafeteria Carollers**



Under the direction of Alf Christoffersen (right) a large group of employees joined together to sing Christmas Carols during lunch time at the Cafeteria. Each year, for several days before the Christmas Holidays, this group sings for the enjoyment of all employees of Brookhaven.

**AEC Chairman To Run CIA**

President Nixon on December 21 named AEC Chairman James Schlesinger to succeed Richard Helms as Director of the Central Intelligence Agency.

Helms, director of the CIA since 1966 will be nominated as ambassador to Iran, according to White House Press Secretary Ronald Ziegler.

Schlesinger, an economist, was assistant director of the Office of Management and Budget before he was appointed to head the AEC in August, 1971. According to White House sources, the CIA's mission will remain the same, but there is a possibility of major changes in the agency's structure and method of operation.

To date there has been no announcement of a replacement for Schlesinger nor a date for his leaving the AEC.

**World of BNL**

The radio program, World of BNL, is broadcast every Sunday over two AM and two FM stations, as follows: at 8:15 a.m. over WBLI-FM (106.1), Patchogue; WRCM-FM (103.9), Riverhead; WHRF-AM (1570), Riverhead; and 11:15 p.m. over WGLI-AM (1290), Babylon.

On Sunday, January 7, Ronald Peierls will discuss Physics and Fundamental Particles (Part II) with host Norb Dernbach.

Beginning January 9, the World of BNL will also be broadcast every Tuesday at 10:00 a.m. over WSHR-FM (91.9), Lake Ronkonkoma; the topic for January 9 will be Use of 3-D Television in Research.

**Vineyard Chosen** (Continued)

joined the faculty of the University of Missouri as Assistant Professor of Physics. In 1952 he was named Professor of Physics, a post he retained until 1954 when he joined BNL.

His main research interests included the application of neutrons to solid state physics, radiation effects in solids, and structural imperfections in solids.

He has served on the editorial boards of six physics journals and as a member of numerous committees for the National Science Foundation, National Research Council, National Academy of Science, American Physical Society and several universities, and as a consultant to various laboratories.

Dr. Vineyard has published more than 40 articles on his research in physics, and is co-author with G.J. Dienes of a book "Radiation Effects in Solids." In June of 1971 he was honored by the Battelle Memorial Institute, which dedicated to him its six-day conference on "Interatomic Potentials and Simulation of Lattice Defects."

Dr. Vineyard is a Fellow of the American Physical Society and is Chairman elect of its Division of Solid State Physics. He is a member of Sigma Xi and the American Association for the Advancement of Science.

Dr. Vineyard's wife, Phyllis, is Vice President of the Suffolk Community Council and serves on the national board of the Planned Parenthood Federation of America.

They have two children. John, 25, is an instructor of Social Studies at the Franklin Institute of Boston; Barbara, 21, is a senior at Sarah Lawrence College.

**Past Directors** (Continued)

staff, he had been engaged in war-time service at M.I.T.'s Radiation Laboratory. Dr. Haworth, who has the rare ability to combine long-range planning with meticulous attention to detail, may be called the architect and builder of Brookhaven National Laboratory. He resigned on April 1, 1961, to accept membership on the Atomic Energy Commission.

In 1963 Dr. Haworth was appointed to head the National Science Foundation, a post he held until 1969 when he rejoined the AUI organization as Special Assistant to the President and Special Consultant to the Director of BNL.

In the brief interval following Dr. Haworth's resignation from Brookhaven in 1961, Dr. Gerald F. Tape, who had served with great distinction as Dr. Haworth's deputy, functioned as Acting Director until Dr. Goldhaber's appointment as Director. At that time Dr. Tape became Vice President and then, for a short time, President of AUI, until his appointment to the Atomic Energy Commission in 1963 as successor to Dr. Haworth. In April 1969 he resigned from the AEC to become President of AUI, a post he holds today.

**CREF Unit Values**

1972			
January	\$48.27	February	\$50.49
March	51.36	April	51.80
May	53.74	June	51.80
July	51.15	August	51.95
September	50.98	October	50.80
	November		\$52.53

**Walter & Schwartz To Deliver 116th Brookhaven Lecture**

The 116th Brookhaven Lecture will be given on Wednesday, January 10, 1973, at 8 p.m. in Bernker Hall by Roderich Walter, Ph.D. and Irving Schwartz, M.D. of the Mt. Sinai School of Medicine of the City University of New York, Department of Physiology. George C. Cotzias, M.D. will introduce the lecture, entitled "Conformation of Neurohypophyseal Hormones in Relation to Their Biology."

During the course of the lecture, Drs. Walter and Schwartz will describe the work that led to the solution of the three-dimensional structure of the hormones oxytocin and vasopressin. Oxytocin plays an important role in pregnancy, and vasopressin is of fundamental importance in regulating body hydration by action on the kidneys. It is noteworthy that this work also represents the first elucidation of the conformation of peptide hormones in solution.

The lecturers will take a fresh look at the basis for the physiological action of these hormones, how they work at the cellular and molecular levels, how they are inactivated in the body, and how they give rise to "minihormones" which regulate anterior pituitary function and influence memory and behavior. Moreover, Dr. Walter will discuss how he and his collaborators determined the complete structure of a protein from brain which specifically binds neurohypophyseal hormones before they are released into the bloodstream. Slides will be used to illustrate the lecture.

Dr. Schwartz gave the second Brookhaven Lecture entitled "Current Ideas on the Endocrine Regulation of Cellular Processes" in 1960. That lecture included a summary of work done in his laboratory on neurohypophyseal hormones in the late fifties. Dr. Schwartz was a full-time member of the BNL Medical Department staff from 1958 to 1961, and he has been closely associated with BNL as a Research Collaborator from 1961 until the present. Dr. Schwartz is currently Dean of the Mt. Sinai Graduate School of Biological Sciences of the City University of New York, and also Chairman of the Department of Physiology of the Mt. Sinai School of Medicine.

Dr. Walter received his Ph.D. in organic chemistry from the University of Cincinnati. He became interested in the life sciences and decided to put his training in chemistry at the service of the life sciences and medicine. Dr. Walter worked full time at Brookhaven from 1965 to 1968. He worked with Drs. Albrecht, Eggena, Glass, Gordon, Grzonka, Koida, Overweg, Pande, Theodoropoulos, and Dr. Schwartz on a variety of problems concerned with neurohypophyseal hormone action. Dr. Walter is presently Professor of Physiology at the Mt. Sinai Graduate School of Biological Sciences and the Mt. Sinai School of Medicine, and he also continues to work at BNL as a Research Collaborator.

**Husband - Wife Team**



Tom and Carol Hall, toast one another and the New Year after they both received their Ph.D. degrees in Physics from Stony Brook. The young couple completed their academic requirements just five days before Christmas and received their degrees together on New Year's Eve. Tom, 28, is a solid state physicist who worked at BNL on his thesis under Allen Goland of the Physics Department. Carol, 26, is a theoretician who did her research on statistical mechanics.

**Here and There**

Claire Lamberti

E.B. Forsyth (Accel.) and D.H. Gurinsky (DAS) attended a conference in Washington, D.C., December 11-14, entitled "Research for the Electric Power Industry." The conference was sponsored by the Power Engineering Society of the IEEE with the cooperation of the American Society of Mechanical Engineers. Mr. Forsyth sat on a panel concerned with underground power transmission and gave a talk entitled "Superconducting Cables - Some Research Problems."

Robert L. Chase (Instrumentation) has been named Fellow of the Institute of Electrical and Electronics Engineers, effective January 1, 1973. Mr. Chase is presently on leave of absence from the Instrumentation Division, at Orsay, France.

**Arrivals & Departures**

**Arrivals**

- Walter Bauer ..... Accelerator
- Daniel D. Jones ..... Chemistry
- Terry Smith ..... Applied Science

**Departures**

- Charles R. Clairborne ..... Medical
- Joseph S. Gerard ..... Biology
- Ping-Kay Hon ..... Biology
- Bernice K. Johnson ..... Medical
- Thelma Langhorn ..... Medical
- Marion Mayhew ..... H.P.S.
- Louis F. Ruppert ..... Biology
- Joseph P. Smolski ..... Mech. Engrg.

**IN MEMORIAM**

Charles Weinrich, who retired in December 1969, passed away on Sunday, December 24, 1972, at Brookhaven Memorial Hospital. Burial took place Wednesday, December 27 from the Emanuel Lutheran Church, Patchogue. Weinrich was employed in Plant Engineering since starting at BNL in 1947.

**BROOKHAVEN BULLETIN**

Published Weekly for the Employees of Brookhaven National Laboratory

CARL R. THIEN, Editor  
CLAIRE LAMBERTI, Editorial Assistant

40 Brookhaven Ave. Upton, N.Y. 11973  
Telephone 516 345-2345

NORBERT J. DERNBACH  
Public Relations Officer

## Cooking Exchange

by Jane Love

The Cooking Exchange is changing days! We're moving to Wednesday - the first session, January 10. We meet in the Recreation Building in the Apartment Area, from 3 to 5, baby sitters are provided and the cost is one dollar. Announcements of the meeting appear in the *Bulletin*. For this you get a chance to explore the glorious world of international cooking.

Old friends of the Cooking Exchange enjoyed a lovely Christmas Party, complete with egg nog, mulled wine and scrumptious assortments of hors d'oeuvres. We want new friends - we want you to come and join us as we learn together the pleasures of making new dishes to amaze, thrill, delight, or dumbfound our family and friends.

On the schedule for the Spring Meetings will be authentic German cooking - can you believe *Kalb:haxmit Gewurzgurkensosse?* French - now, who doesn't want to know about *Cordon Bleu?* Japanese - how about a little *Sunomono*, *Gohan*, *Takimono*, and *Nabemono* for a change? Mexican - *Tacos* like Jack in the Box never made? Regional American cooking - from the shores of New England Boiled Dinner to Ceasar Salad with Pecan Pie and Pot Roast. Hits of the Past-Oldies and goodies culled from our two cook books and too good to miss - like Mock Strudel and Piroshki, and Shrimp Mousse. A Blow for Men's Liberation - for the James Beard cum Claybourne Crew. - And plenty more. There is room for your recipe - there is room for you.

The requirements are simple - enjoy cooking, enjoy learning about cooking, enjoy meeting people from other places and sharing together those things that increase your appreciation of good food.

The Best for Last - The Banquet, held in the Spring, and for all those who, during the year, have demonstrated at a meeting. Now you don't have to be Julia Child or even the Galloping Gourmet! Even the simplest salad dressing or the easiest potato dish is welcome. Mostly, you're welcome. "Try us, you'll like us."

## Theater Group

The Theater Group has announced the appearance of the Poets Repertory Theater at BNL on January 15, 1973. Its producer/director is Charles Kellogg who holds a doctorate in English from SUNY and has had more than 20 years of theatrical experience.

The Poets Repertory Theater is radically audience-oriented. Material is chosen for its power to generate intellectual and emotional involvement. Scenery, lighting and stages are minimized or eliminated.

*Ubu the Magnificent*, a poem-drama commingling the tragic and comedic qualities of contemporary life will share the program with dance and bardic interpretation of poems by Aaron Kramer and Lord Sweetlove. A discussion about the play's and poem's impact and ideas will be an integral part of the evening.

The Theater Group meeting will begin at 8:00 p.m., followed by the Poet's Repertory Theater performance at 8:30 p.m. Location will be announced.

## Social Security Takes A Bigger Bite

Changes in Social Security for 1973 increase the tax from 5.2% to 5.85% on a maximum lifted from \$9,000 to \$10,800 of employees' annual salary. The maximum annual tax in 1972 was \$468.00, in 1973 \$631.80, for a total increase of \$163.80.

BNL weekly employees will feel the impact on their payroll checks of January 4th, and monthly employees January 31st.

### Examples

Weekly Salary	Weekly Social Security Tax		Weekly Increase
	1972	1973	
\$100	\$ 5.20	\$ 5.85	\$.65
125	6.50	7.31	.81
150	7.80	8.78	.98
175	9.10	10.24	1.14
200	10.40	11.70	1.30
225	11.70	13.16	1.46
250	13.00	14.63	1.63
275	14.30	16.09	1.79
300	15.60	17.55	1.95

Note: For weekly pay of \$207.69 or more, the annual boost for 1973 will be \$163.80.

## French Film At Berkner On January Sixteenth

"Les Biches (The does)," a film directed by Claude Chabrol, will be presented by the BNL French Group at Berkner Hall on Tuesday, January 16, at 8:30 p.m. For those who are not members of the French Group, there will be an admission charge of \$1.50.

Chabrol is perhaps best known in the U.S. for his chilling film "The Cousins"; another more recent film, "The Butcher," played locally a few months ago. The central relationships in his films are typically characterized by repressed emotions that finally burst to the surface with terrifying violence. Chabrol depicts a world in which a thin veneer of elegance barely conceals the dark and chaotic forces beneath.

In "Les Biches," Jacqueline Sassard plays a homeless young artist who becomes the mistress of a rich, bored woman, played by Stephane Audran, who is Mrs. Chabrol in real life. Another complication is added when Jean-Louis Trintignant (the male half of "A Man and a Woman") moves in with the two women. The *ménage à trois* begins idyllically enough, but the tensions become unendurable for the young artist and she is inevitably driven to violence.

"... A thing of beauty... delirious, decadent, but ultimately delightful to those with a taste for appearances as the purest language of the cinema," wrote Andrew Sarris in *The Village Voice*.

The film is in French, with subtitles.

## Bowling News

Grace Fales

### Pink League

End of the first half for the Pink League shows the following results:

Team	Wins	Losses
Fiscal Assets	70	35
Hopefuls	65	40
Pinsplitters	60	45
Alley Oops	50	55
Medi-Tarsals	47	58
Pick-It-Ups	47	58
Bioboozers	43	62
Spare	38	67

Hearty congratulations are extended to the Fiscal Assets who have taken first place. Hope you all had "Happy Holidays." Our next date for bowling is January 9, 1973. See you there!!

### Green League

Congratulations to the Designers who are now the proud owners of first place in the League's first half. They finished with a 72-33 win/loss record (.686%) and 44,180 total pins. The second place winners, the Sandbaggers finished with a 67-38 win/loss record (.638%) and 44,171 total pins. S. Kiss won his Club Awards with a 203/236/630 scratch/723 gross series. J. Scesny continued to demolish his high handicap of 3 with a 205/225/617 series. Other 200's were rolled by J. Lee 226, C. Bohnenblusch 224, K. Riker 201/216, H. Marshall 210, R. Jones 209, R. Meier 206, N. Anderson 200, and C. Tomesch 200.

## Selected Reading

Amer. Sci. 60 November-December 1972

Undergraduate science education: An overview.

P. Doty and D. Zinberg. 686-95

Bentley and Lenard: Pioneers in cloud physics.

D.C. Blanchard. 746-9

Minerva 10, October 1972

The invitation to Caesar. 513-18

The argument for the self-government and public support of science in Weimar Germany. B. Schroeder-Gudehus. 537-70

Some practical problems of scientist-advisers. R. W. Nichols. 603-13

Sat. Rev. 60, January 1973

Happy birthday, transistor. I. Asimov. 45-51

Science 178, December 15, 1972

Grant termination: Scientist wins \$16 million for loss support. B. J. Culliton. 1177-80

H. Allen Smith Jet Propulsion Lab - or what's in a name? R. Gillette. 1178

Los Alamos Scientific Laboratory: Weapons are still the focus. A.L. Hammond. 1180-3

U.N. Environmental Program: Despite hitch, coming on strong. J. Walsh. 1183-5+

Technol. Rev. 75, December 1972

The new-priority problem. F.H. Schott. 39-43

Reflections after fifteen months. Remarks by William O. Doub, Commissioner, U.S. Atomic Energy Commission, before the Atomic Industrial Forum 1972 International Conference, Washington, D.C., November 14, 1972. Press Release No. S-21-72, December 11, 1972

## BNL Rifle & Pistol Club

The BNL Rifle & Pistol Club will hold its first monthly meeting of 1973 in the apartment area recreation building at 5:10 p.m., January 10. There will be a showing of an interesting movie entitled "Bullet Casting & Accuracy." Election of club officers for the 1973 season will follow.

## BERA Concert Group -



Clara Freedman - Recitalist

## Special Free Concert

The Concert Group is pleased to present a piano recital by Clara B. Freedman on Sunday evening, January 7.

Miss Freedman attended the State University of New York at Stony Brook and the Juilliard School of Music, where she studied piano with James Friskin, Martin Canin and Rosina Lhevinne, and chamber music with Louis Persinger and Paul Makanavitsky. Her teachers also include Jean Casadesus and Jerome Lowenthal. She has performed in Master Classes in the USA and abroad and has concertized in both solo and chamber music performances. In March 1973 Miss Freedman will be performing in several European cities as part of her European recital debut.

Miss Freedman's recital at BNL will include works by Haydn, Schumann and Aaron Copland and will end with Schubert's great posthumous B flat Sonata.

There will be no admission charge for this concert; BERA will appreciate donations to help defray expenses.

Date: Sunday, January 7, 1973

Time: 8:00 p.m. (note change from usual time!)

Place: Berkner Hall

## Mountain Club Outing



The December outing of the Mountain Club took place on December 17 at Harriman State Park. Bob Bergoffen, Mike Petrolak, Stephany Petrolak, and Cathy Taylor braved 16 degree temperatures and blustering 40 mph winds to hike in the park. The hike twisted through forests, across streams and along ridgetops. Rocks and vegetation were covered with glistening ice and there was one extraordinary view of the New York skyline from atop Diamond Mountain.

## Mountain Club Meeting

The monthly meeting of the BNL Mountain Club will be held on Thursday, January 11, at 7:30 p.m. in the Recreation Hall.

A slide presentation on spelunking will be given by Cathy Taylor of the Chemistry Department, after which the group will discuss the January trip.

Coffee and cake will be served, and membership dues for the coming year will be collected. Members and non-members are invited to this first meeting of the new year.

