

Virginia Scientists

Volume XXI, Issue 2

September-October, 2012

President's Message ... Ralph P. Eckerlin

There is lots of good news so I will begin with the bad. Long time Academy leader Ertle Thompson died on 5 June 2012 at age 83. Dr. Thompson was a Professor of Science Education at the University of Virginia for many years. He served the Academy as President in 1982-1983 and was the Academy's Delegate to AAAS and NAAS for 38 years. He was a Fellow of the Academy and AAAS. Ertle was a soft-spoken, take-charge gentleman who served the Academy well and long. He is survived by his wife June, a son and daughter, five sisters, and numerous grand- and great-grandchildren.



Dr. Ertle Thompson

VAS had a very successful 90th Annual Meeting, and VJAS their 71st Annual Meeting at Norfolk State University in May. The facilities were very good but the people from Norfolk State who ran the registration, housing, A-V, etc. were even better. About 100 student volunteers were enlisted to provide support. One of the members from Virginia Tech, where the 91st meeting will be held, remarked that Norfolk State had set the bar "pretty high." One of the visual highlights for me was the view of the former library building being demolished in close view through the huge glass window of the new library where the President's Reception was held. The Negus Lecture by Dr. Thomas Lovejoy was stimulating and thought provoking.



Some notable awards at the meeting included: The Ivey F. Lewis Distinguished Service Award for 2012 to Tidewater Community College. The J. Shelton Horsley Research Award to Kristian M. Hargadon, Osric A. Forrest and Pranay R. Reddy of Hampden-Sydney College. Arun K. Verma of Hampton University is the newest VAS Fellow. Congratulations to all.

Continued, See "Eckerlin," page 3

Fall Undergraduate Research Meeting Proposals Due October 5 ... \$2500 in Grants

Undergraduates from all over Virginia will present posters of proposed 2012-13 research in competition for five grants of \$500 each on Saturday, October 27 in Richmond at J. Sargeant Reynolds Community College-Parham Road Campus.

To be eligible for a research award, the student(s) must submit an application electronically to President-Elect Dr. Deborah O'Dell ... dodell@umw.edu ... by October 5, 2012. Grant application instructions and forms, meeting registration forms, and poster guidelines are available at <http://66.147.244.216/~vacadsci/> ... Click "Fall Undergraduate Meeting."

Research grant recipients will also receive free student membership in the Academy for 2013 and are expected to present the results of their research projects at the Annual Meeting at Virginia Tech in May, 2013.

Faculty mentors must be Academy members in "good standing" for 2012; find a VAS Membership Form here on page 3 or go to <http://66.147.244.216/~vacadsci/> ... Click "Membership" or "Membership Renewal."

2012 Outstanding Scientists

Governor Bob McDonnell and the Science Museum of Virginia announced Virginia's Outstanding Scientists of 2012 and the Governor's Award for Science Innovation presented by Altria at SMV's General Assembly Reception, Jan. 19.

Richard L. Guerrant, M.D., Thomas H. Hunter Professor of International Medicine and Director for the Center of Global Health at the University of Virginia, is an influential leader in infectious diseases and global health. He discovered three gastrointestinal pathogens as leading causes of persistent diarrhea and defined the cognitive deficit



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Remember ... See pages 4 & 5

**Our 90th Anniversary Year is
Your Opportunity to Recognize the
People Who Have Made
a Difference in Your Life.**

2012 Scientists *(continued from page 1)*

most affected as similar to that seen in Alzheimer's disease. His research attracted the Bill and Melinda Gates Foundation to fund a \$30 million project in Asia, Africa and Latin America to understand the impact of intestinal infections on malnutrition and cognitive development and develop innovative solutions to eradicate this problem.

Kenneth S. Kendler, M.D., director of the Virginia Institute of Psychiatric and Behavioral Genetics and Rachel Brown Banks Distinguished Professor of Psychiatry at Virginia Commonwealth University, is one of the top psychiatric geneticists in the world and one of the most internationally cited researchers in behavioral medicine. With colleagues at VCU, his work at the Virginia Twin Registry led to the development of a new paradigm for behavioral genetics that clarified the developmental pathways through which genes and environment contribute to the risk of mental illness. With a team of collaborators using rapidly advancing molecular methods, he worked extensively in Ireland and more recently in China to identify large informative samples of subjects with schizophrenia, alcoholism and depression, to clarify the specific genes that influence vulnerability to these disorders.

John D. Milliman, Ph.D., Chancellor Professor, Virginia Institute of Marine Science at the College of William and Mary, is an international expert in the field of sedimentary geology, specifically in the study of the transport, deposition and diagenesis of sediments and river discharge into the ocean. Dr. Milliman's research has spanned several continents in his endeavor to discover the impact of climatic and human influences on rivers around the world. Chief editor of *Deep Sea Research*, Dr. Milliman has authored over 200 contributions in sedimentary geology, river discharge and carbonate chemistry in the world's oceans and produced two of the most cited articles in all of geology; his groundbreaking book is *River Discharge to the Coastal Ocean: A Global Synthesis*.



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Governor's Award for Science Innovation

Presented by Altria

Silverchair Information Systems, founded in 1993 by Thane Kerner and Elizabeth Willingham, has grown to over 150 employees delivering advanced semantic technologies, publishing platforms, and e-learning solutions to scientific, technical and medical

publishers, professional societies, and the federal government. In 2011, Silverchair launched SCM6, built using a natively semantic architecture; eight leading scientific societies simultaneously announced plans to migrate their digital publishing operations to, and develop new product lines on, the new platform. Silverchair was nominated by the Hampton Roads Hispanic Chamber of Commerce.

2012 SCHEV

Outstanding Faculty Awards

Among winners of the State Council for Higher Education in Virginia were four STEM faculty:



Giorgio Ascoli, Professor, Neuroscience, George Mason University.

Robert Hazen, Professor, Earth Science, George Mason University.



Rasha Morsi, Associate Professor of Engineering, Norfolk State University (Teaching with Technology).



Anne Stewart, Professor of Psychology, James Madison University.



Each recipient was awarded \$5000 made possible by the continuing support of the Dominion Foundation.

Honorees in other disciplines were...

Kathleen Garces-Foley, Associate Professor of Religious Studies, Marymount University (Rising Star).

Brian Glemza, Assistant Professor of English, Randolph-Macon College (Rising Star).

Douglas Hicks, Professor of Leadership Studies & Religion, University of Richmond.

James Kahn, Professor of Economics, Washington & Lee University.

Zina McGee, Professor of Sociology, Hampton University.

Charles Poland, Professor of History, Northern Virginia Community College.

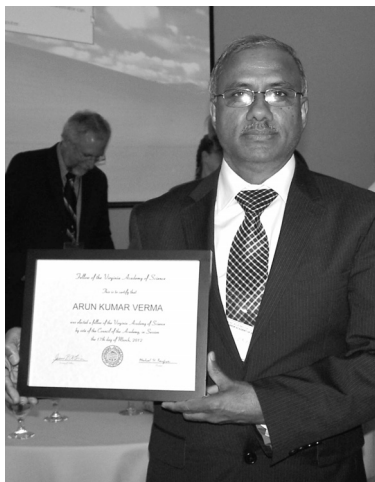
Lesley Wheeler, Professor of English, Washington & Lee University.

Steve Yetiv, Professor of Political Science and International Studies, Old Dominion University.

President Eckerlin's Message

(Continued from page 1)

I have recently attended the Trust Committee meeting and the VJAS Committee meeting and can report more good news. The Academy is financially secure and in sound leadership hands.



2012 Fellow:

Dr. Arun K. Verma

University Professor of Mathematics
Hampton University

The meeting is a fun day to meet and interact with other young scientists from around Virginia and to hear a stimulating lecture.

— Ralph Eckerlin
Professor, Biological Sciences
Northern Virginia Community College
Annandale Campus

The Junior Academy is fine tuning the many changes that were made at the recent meeting where Middle School and High School presentations were judged separately.

Notices about the Fall Undergraduate Research Meeting in October will soon be sent to all VAS members. Alert your students to the opportunity to win a \$500 grant to support their research.



President Mike Renfroe presents The Ivey F. Lewis Distinguished Service Award to Tidewater Community College's Dr. Michael Summers, Provost of the Virginia Beach Campus & Jan Taylor, Student Activities Director. TCC, a VAS Patron and Institutional Member, was recognized for leadership in science education and more than 40 years of continuous support of Academy projects and activities.

VIRGINIA SCIENTISTS is the newsletter of the Virginia Academy of Science and is published two times a year. In addition to members, it is also mailed to government officials, members of the General Assembly, and Virginia college and university presidents. Correspondence should be addressed to the Editor, Deborah Neely-Fisher (804-523-5741) at dneely-fisher@verizon.net.

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VIRGINIA ACADEMY OF SCIENCE APPLICATION FOR MEMBERSHIP

Name (Please Print) _____

Home Phone (____) _____

Office Phone (____) _____

E-mail _____

Address _____

City _____ State _____ Zip _____

Institution or Business _____

Position -- Title _____

Interest -- Section No.(s) _____ First no. indicates major interest

Contacted by: _____

Make check payable to Virginia Academy of Science and send to:

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TIN 54-6038-285

Membership in the Academy is organized into sections representing various scientific disciplines as follows:

- | | |
|--|---|
| 1. Agriculture, Forestry & Aquaculture | 10. Psychology |
| 2. Astronomy, Mathematics & Physics | 11. Education |
| 3. Microbiology & Molecular Biology | 12. Statistics |
| 4. Biology | 13. Aeronautical & Aerospace Sciences |
| 5. Chemistry | 14. Botany |
| 6. Materials Sciences | 15. Environmental Science |
| 7. Biomedical & General Engineering | 17. Computer Science |
| 9. Medical Sciences | 19. Natural History & Biodiversity |
| | 20. Structural Biology, Biochemistry and Biophysics |

Annual Membership Dues - Please check one. Includes subscription to *Virginia Journal of Science*

Check Your Membership Choice:

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| <input type="checkbox"/> Regular - Individual 35.00 | <input type="checkbox"/> Business - Regular 100.00 |
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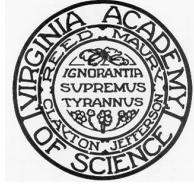
Remember

Founded the Science Museum of Virginia ... With the Garden Clubs of Virginia, established the Virginia State Parks System ... Established, with the early support of the DuPont family, the first Scientific Research Fund in Virginia ... Founded the Virginia Institute for Scientific Research (erected at the University of Richmond), the forerunner of Virginia Centers for Innovative Technology, funded by the Virginia General Assembly ... Founded The Virginia Junior Academy of Science to foster original research in Virginia middle and high schools ... Published the *Flora of Richmond and Its Vicinity* ... Leaders' testimony at the Scopes Trial and later resolutions on evolution and its teaching in science curricula of Virginia schools ... Advocated inclusion of women and African-American scientists and science educators in professional meetings ... Founded the Virginia Journal of Science ... Hundreds of teacher education and training programs in the sciences, mathematics, medicine, and technology ... Established the Kiser Fund for Science Teacher Education ... Published *The James River Basin: Past, Present, and Future*, funded by the Virginia General Assembly, the first comprehensive, multidisciplinary account of the James and its resources, landforms, flora, fauna, industries and businesses ... Established the VJAS Research Fund to support scientific investigations by Virginia's secondary school students ... Annually sponsors "The VJAS Experience" bringing hundreds of secondary students to Virginia colleges and universities to stay on campus and visit research facilities ... Founded the Virginia Science Resource Network to mentor Virginia's teachers and students ... Established the Annual Undergraduate Research Conference to financially support original research in four-year and two-year curricula ... Established scientific advisory service to Virginia Governors and state agencies beginning with the state's kepone disaster ... Supported the founding of the Virginia Institute of Marine Science (College of William and Mary) ... Decades of leadership for the publication of the first *Flora of Virginia* since 1739 (to be published 2012)... Annually awards over \$80,000 in sponsored/endowed scholarships and prizes to Virginia middle and high school students for original research ...

NEXT ...???

***Write Virginia's History
with
The Virginia Academy of Science!***

1923



2013

90 Years of *Service to Science and Virginia*

When we met at Norfolk State University in May 2012, the Academy began its 90th year! As you can see from a sampling of some of our Academy's accomplishments on the preceding page ...

We have much to celebrate!

We hope you will join in this historic occasion and make it a uniquely special moment by contributing a token of your recognition. We seldom request our Members and Friends to donate to the Academy ... But we feel certain that most of the Academy's Supporters would appreciate the opportunity to be a part of this joyful experience. Too seldom do we pause and recognize all the good and worthy achievements of the Academy. Too seldom do we recognize the dedication and hard work of those who have committed their time, effort, and expertise to our Academy's mission.

We hope you feel the same!

***Recognize someone who has made a difference in your life or the history of the Academy ... A Scientist?
... An Educator? ... A Family Member? ... A Mentor? ... A Coach? ... A Role Model? ... A Supporter?***
You & your Honoree will be recognized at the 2013 Meeting and listed in a special 90th Anniversary issue of *Virginia Scientists*.

Just fill in the form below, make your check payable to Virginia Academy of Science, and send it to ...

Art Conway, Executive Officer, Virginia Academy of Science
c/o Science Museum of Virginia, 2500 West Broad Street, Richmond VA 23220
Art is ready to assist you with any guidance you may wish at 804-864-1451.

Honoree's Name(s): _____

Check one: ☐ "In memory of" ☐ "In honor of"

Your name(s) as you wish to be printed in recognition lists:

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Amount of check enclosed \$ _____ Mark your check: "Remember"

To recognize more than one person (couple or family), kindly photocopy the blank form, enter your information and make check for total contribution payable to Virginia Academy of Science.

Thank You!

*(The Virginia Academy of Science is an IRS 501(c)3 charitable and educational organization.
We do NOT share or sell our donor information.*

Who's Been Who in VAS History ...

William T. Sanger

12th President of the Virginia Academy of Science, 1934-35



In 1925, the Medical College of Virginia selected William Thomas Sanger, then Secretary of the Virginia State Board of Education, as its third president. Due chiefly to his vision and efforts, Sanger led MCV through over thirty years of tremendous growth both in reputation and capacity. Upon his retirement in 1956, the position of chancellor was created for Sanger and he remained active in the affairs of the College until his death in 1975 at the age of 89.

He was born September 16, 1885 in Bridgewater, (Rockingham County) Virginia. Although his large family moved several times, Sanger graduated from Bridgewater College and then earned his M.A. in psychology from Indiana University in 1910. He began his lifelong commitment to teaching at his alma mater. While at Bridgewater, he pursued graduate work in psychology first at Columbia and then at Clark University, where he became close friends with renowned psychologist G. Stanley Hall, earning the Ph.D. in 1915. Dr. Sanger left Bridgewater in 1917 for Harrisonburg

State Teachers College (now James Madison University), where he was a dean and headed the education department. In 1921 Sanger was named executive secretary of the Virginia State Teachers Association and editor of *The Virginia Journal of Education*; prior to leading the Board of Education and then MCV.

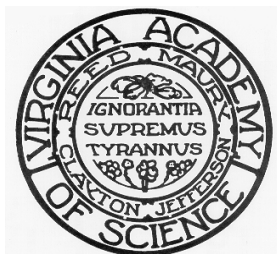
In a televised ceremony at the 1956 meeting, the Academy honored two members with its first Distinguished Service Award. One was Academy founder, first president, and eventually the Award's namesake: Ivey F. Lewis of the University of Virginia. The second honoree -- in testament to his roles as a "national leader" ... and "builder of the Medical College of Virginia," was William T. Sanger. In 1970, Dr. Sanger was elected to the first class of Academy Fellows. {References — photo & crest: *The X-Ray* 1931

(MCV/VCU; <http://archive.org/stream/xray1931medi#page/n5/mode/2up>) ... content: Box-folder, Papers of William T. Sanger, T83/Jul/12, Special Collections and Archives, Tompkins-McCaw Library, VCU (<http://ead.lib.virginia.edu/vivaxtf/view?docId=vcu-tm/vircuh00001.xml;query=&brand=default>); Staggers, H.J. & Flory, W.S. (1973) *A History of the Virginia Academy of Science, 1923-1973*. Ch. 5, pp. 19-20 (<http://66.147.244.216/~vacadsci/history/chap5.PDF>); *Ibid.*, Flory, Ch. 7, p. 37 (<http://66.147.244.216/~vacadsci/history/chap7.PDF>)}



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Save the Date!

October 27

***2012 Fall Undergraduate
Research Conference***

See Page 1

Remember