

**Volume 16 Number
1
Winter 2001**



Contents

[Case Study](#)

[From the Director,
VGEC](#)

[From the Director,
VCoA](#)

[From the
Commissioner,
VDA](#)

[Focus on the VGEC](#)

[Focus on the VCoA](#)

[Increasing Awareness
and Knowledge of the
Aging Field Among
Virginia's Medical
School Students](#)

[In Memoriam
Albert E. Millar, Jr., Ph.
D.](#)

[Medication
Management Training
Course](#)

Vision and Hearing Loss in the Older Adult - “Double Trouble”

Paige Berry

Paige Berry is the National Coordinator for Older Adult Services for the Helen Keller National Center for Deaf-Blind Youths and Adults (HKNC), Sands Point, NY. She coordinates professional training, provides consultation and technical assistance, develops specialized resource materials, and advocates for services for older adults with hearing and vision losses. Paige's office is located in the Rehabilitation Counseling Department at Virginia Commonwealth University in Richmond, VA where she is an Assistant Professor and teaches American Sign Language.

Educational Objectives

1. How to recognize age related vision and hearing loss.
2. How the loss of both vision and hearing affect the individual's day to day functioning.
3. Services and technology available to assist the professional in better meeting the needs of the individual who is experiencing a vision and hearing loss.

Background

It is not uncommon for an older person to experience both a vision and a hearing loss. Persons with this combined sensory loss are often referred to as individuals who are Deaf-Blind. For terminology clarification, Deaf-Blindness does not always mean a total loss of vision and hearing. The combined loss, however, can make everyday tasks difficult. This article will focus on those individuals who are hard of hearing and visually

[ARDRAF Final Project Reports from the 1999-2000 Alzheimer's Research Award Fund](#)

[ARDRAF Call for Proposals for 2001-2002 Alzheimer's Research Award Fund](#)

[VCU Department of Gerontology Spring 2001 Course Schedule](#)

[Calendar of Events](#)

impaired, not those who are Deaf-Blind and rely on American Sign Language as their primary means of communication.

As professionals working in the areas of gerontology, rehabilitation or habilitation it is important to understand age related hearing and vision loss. Because vision and hearing loss increase in prevalence as age increases, professionals who work with older adults will encounter people with a wide range of difficulties with their vision and hearing. Meeting the communication needs of these individuals requires that professionals be able to recognize sensory losses, accommodate for them and help their clients to understand and cope with them.

Difficulty in communication is often seen as an inability to function predictably and rationally. When behavior changes are noticed in an older adult, loss of vision and/or hearing should always be considered as a possible contributing factor. Older people worry that their families believe they have lost the ability to function independently and to handle their own affairs. Other feedback and reactions may cause older adults to begin to doubt their own abilities. They may also be concerned that certain responsibilities may be taken away from them (Hull, 1982). Confusion, inappropriate responses to questions and apparent disorientation may all result from age-related hearing and vision losses. Because these losses often develop slowly, a problem may not be recognized until a great deal of vision or hearing is lost. Slow development of sensory losses contributes to related behavior changes being misunderstood and inappropriate assumptions made about those behavior changes. Being sensitive to behavioral change and ruling out a sensory problem before assuming a mental problem will prevent needless loss of functioning and quality of life (Bagley, 1989).

Age and Hearing Loss

A variety of medical conditions places all older adults at risk for hearing loss. They include: vascular disease (hypertension and cerebrovascular arteriosclerosis), metabolic disease (renal disease and diabetes), and infections. In addition, many of the drugs commonly used by older adults are ototoxic, in other words, toxic to the auditory system (Hughes & Koegel, 1985).

Age and Vision Loss

The leading causes of new blindness among older adults are macular

degeneration, glaucoma, cataracts, and diabetic retinopathy (Swanson, 1994).

Functional Implications of a Hearing Loss

The common characteristics of age-related hearing loss are: inability to hear high frequency sounds (particularly “th” and “f”), reduced speech discrimination (regardless of the degree of hearing loss) particularly in noisy or acoustically poor environments, distortion of speech (despite loudness), and bilateral hearing loss. The most difficult problem facing the older adult with an age-related hearing loss is reduced speech discrimination resulting in the complaint, "I can hear you but I can't understand you." (Mascia, 1994).

Functional Implications of Vision Loss

Presbyopia, the age-related vision change that is considered normal, includes: increased sensitivity to glare, dryness of the eyes, increased need for light, slower distance accommodations, slower adjustment to different light conditions, reduced depth perception, reduced contrast sensitivity, and reduced hue discrimination.

Behavioral Signs of Hearing Loss

Behavioral responses to a hearing loss will vary with the individual. The following behavior changes might indicate that an older person is having difficulty hearing:

- Changes in the volume of the television, or radio, especially an increase in volume and sitting closer than usual,
- Leaning closer to the speaker during conversations, or cupping the hand over the outer ear,
- Difficulty understanding speech on the telephone,
- Difficulty understanding conversations in a noisy environment, such as a restaurant,
- Inappropriate responses to questions or comments unrelated to the general discussion,
- Repeated requests to speak louder, or
- Difficulty in the ability to hear high pitched sounds like door bells, a ringing telephone, a smoke detector or the inability to locate the source of a sound.

Behavioral Signs of Vision Loss

Behavioral indicators of a vision loss will also vary with each individual. The following behavior changes might indicate that an older individual is having difficulty seeing:

- Changes in viewing habits, like holding material very close to the face or at an "odd" angle, squinting or sitting unusually close to the television.
 - Changes in the ability to recognize familiar faces.
 - Changes in grooming habits, like stains on clothing, mismatched clothes, uncombed hair.
 - Changes in orientation or increased confusion especially in familiar areas.
 - Hesitancy in movement, stumbling, a shuffling gait or dragging the feet or changes in stance.
 - Changes in the ability to locate "small" objects, such as jewelry, or keys.
 - Changes in eating habits due to increased difficulty in preparing food.
- The anxiety caused by difficulties in seeing food on the plate or on a table may lead an individual to eat less, appear less interested in food, or prefer to eat alone.

Accommodating for Sensory Losses

If you suspect that your client is experiencing a vision and/or hearing loss, the client should have his/her hearing tested by a certified audiologist, and vision tested by an optometrist or an ophthalmologist. Once hearing and vision loss are identified, adaptations and accommodations can be made to make communication and visual tasks easier for the older adult. The individual can utilize a wide variety of devices and adaptive techniques. Among these devices might be: hearing aids or assistive listening devices to improve the discrimination of sounds and speech; amplified doorbells; amplified voice and telephone ringers; vibro-tactile alerting devices for the door, telephone, smoke alarm, and other sound sources; as well as large print or braille telecommunication devices (TTY). Magnifiers or other low vision devices might assist the individual in reading print. Distance devices such as telescopes may be useful for viewing television and spotting objects at more than reading distance. Tactile markers for appliances, clothing, and cooking utensils may be utilized. Environmental adaptations such as color contrast and lighting may also be beneficial.

Case Study

Mrs. Jones is 75 years old and has just learned that she has age-related macular degeneration. She has not had her hearing tested. She lives alone in a small apartment near her son and his family. Mrs. Jones is

having trouble setting stove dials, deciding if her clothes are clean and locating small objects in her home. She can not read books, mail, or her own handwriting. She has no trouble hearing on the phone. However, visitors must knock several times before she comes to the door and the TV volume is always very loud. Although she visits a senior center several days a week, the noise bothers her and makes it difficult to hear other people. She has decided that, rather than embarrass herself because she cannot always understand what others are saying, she will stop going to the senior center.

References

Bagley, M (1989) Older adults with vision and hearing losses among older adults: strategies and resources. Sands Point, New York: Helen Keller National Center

Hughes, G. B. & Koegel L. (1985) Ototoxicity. In Textbook of clinical otology. New York: Thieme-Stratton Inc.

Hull, R. (1978). Hearing evaluation of the elderly. In Katz, J. (Ed.), Handbook of clinical audiology (2nd ed.) Baltimore Md: Williams & Williams.

Luey, H., Belser, D., & Glass, L. (1989) Beyond refuse: Coping with losses of vision and hearing in later life. Sands Point, New York: Helen Keller National Center

Mascia, J. (1994). Understanding age-related hearing loss among older adults. In Watson, Boone & Bagley (Eds.), The challenge to independence: Vision and hearing loss among older adults. Little Rock, AR; University of Arkansas RRTC for Persons Who Are Deaf or Hard of Hearing

Swanson, M. (1994). Vision changes with aging. In Watson, Boone & Bagley (Eds.), The challenge to independence: Vision and hearing loss among older adults. Little Rock, AR; University of Arkansas RRTC for Persons Who Are Deaf or Hard of Hearing.

Study Questions

1. As a service provider, how would you identify problems that might indicate that your client has a vision and/or hearing loss?

2. What medical and rehabilitation assessments would be appropriate for Mrs. Jones?

3. What are the leading causes of blindness in older adults?

To obtain additional information about services for and adaptive techniques used by individuals who have both a vision and hearing loss, you may contact DeafBlind Services at the Virginia Rehabilitation Center for the Blind and Vision Impaired at 1-800-622-2155 V/TTY; the Virginia Department for the Deaf and Hard of Hearing at 1-800-552-7917 V/TTY; Deaf and Hard of Hearing Community Counseling Services at 804-762-9671 Voice, or 804-346-3043 TTY; or the Coordinator of the Older Adult Program at the Helen Keller National Center at 804/827-0920 V/TTY.

[Back to Contents](#)

From the Executive Director, Virginia Geriatric Education Center

Iris A. Parham, Ph.D.

The VGEC has just received a grant from the Virginia Health Quality Center to present a national videoconference of breast cancer prevention and screening with special emphasis on prevention and detection among underserved populations of elderly women. This videoconference will be held in June and "hold that date" cards will be sent out in late January. We are asking all of our readers and colleagues to send the names of elders whom they love who have been touched by breast cancer. At the end of the program, during the presentation of the end credits, we will acknowledge these individuals. This is a labor of love for me because my own wonderful sister is a breast cancer survivor.

The final tapes for the pressure ulcer videoconference were sent, free of charge, to all nursing homes in the Commonwealth. If readers would like copies, they are available at cost by contacting Angela Rothrock at the VGEC. We are grateful to the sponsors of this training with whom we partnered to produce this program: Virginia Department of Medical Assistance Services and the Virginia Pressure Ulcer Quality Initiative. Special thanks for their many contributions are also owed to the Virginia Health Care Association and Virginia Association of Non-profit Homes for the Aging.

Under the direction of Dr. Ayn Welleford, the "Kids Into Health Careers" Initiative has begun. At the same time the new VGEC grant initiative on CNA training, particularly in the area of Alzheimer's disease, has gotten off to a great start. We will be working closely with JABA, VDA, VCoA,

and the Virginia Alzheimer's Association. This should be a very exciting activity. We hope to have further updates of this five-year grant activity in future newsletter issues.

We look forward to a productive and challenging 2001, and we welcome our new staff, Ms. Nikeisha Wyatt and Ms. Tameka Hill. It is great to have them aboard.

[Back to Contents](#)

From the Director, Virginia Center on Aging

Edward F. Ansello, Ph.D.

The last year of the old millennium (yes, we purists believe that the true new millennium just began this January 1st) was productive for us. We served the Commonwealth's elders and families in a variety of ways. VCoA continued our commitment to lifelong learning, offering Elderhostel and special programs across Virginia. We drew almost 2,000 non-Virginians here as well, and we're thankful for their contributions to Virginia's economy. Our focus on disabilities and aging was doubly realized through our developing two highly meaningful conferences; the first, in June, celebrated the multidisciplinary contributions to the understanding of dementing illnesses being made by awards of the Alzheimer's and Related Diseases Research Award Fund, which we administer for the Commonwealth; the second, in November, highlighted our work with lifelong disabilities; its title spoke our emphasis: "Meeting Everyday Needs: Living with Cerebral Palsy and Other Developmental Disabilities." VCoA's lending services grew considerably in the year 2000. We have made substantial investments in the audiovisual and print materials which we loan to fellow Virginians at no cost; our film holdings rose 35% to 175, while the number of loans to agencies and individuals rose 43% and 67%, respectively.

We must point out that we had very valuable partners in accomplishing our work in the year 2000. Partnering has been my mantra, for more can be done with added talents. The Consortium on Successful Aging (CoSA) came to fruition during the past year. Aably led by colleagues at the McQuire Veterans Affairs Medical Center, CoSA has spurred communication and collaboration within the MCV campus and extramurally; the Reynolds Foundation is now considering a CoSA-stimulated grant proposal to improve graduate medical preparation. VCoA staff was also instrumental in the VGEC's interdisciplinary team

training grant project and in obtaining the funded initiatives to train certified nursing assistants in long-term care facilities. Another partnered proposal (with the VCU Department of Gerontology) is awaiting final approval by the funding source; it would address, among other things, compulsive gambling and other unhealthy behaviors among older adults.

Space allows just one more acknowledgement. VCoA staff served with distinction during 2000 on the boards of numerous groups, agencies, and commissions. A few include the Virginia Arthritis Task Force, the Virginia Coalition for the Prevention of Elder Abuse, the Alzheimer's Commission, the Shepherd's Center, the Virginia Association on Aging, and the Central Virginia Task Force on Older Battered Women. This service, as well as over four dozen public addresses and countless instances of providing technical assistance, helped VCoA bring its energies and expertise to Virginia's citizens over the past year.

[Back to Contents](#)

From the Commissioner, Virginia Department for the Aging

Ann Y. McGee, Ed.D.

I want to update you on the various projects and activities that are occurring within the Department as we end a very busy 2000 and enter 2001.

Center for Elder Rights

On September 14, 2000, the Department hosted a ribbon cutting ceremony to open the new Center for Elder Rights. Secretary of Health and Human Resources, Claude Allen, was the keynote speaker and joined with Dr. McGee to cut the ribbon officially opening the Center. The concept for the Center was part of Governor Gilmore's Executive Budget for 2000-2001. The Center is a one-stop focal point for bringing together under one umbrella a variety of legal assistance, consumer rights, aging and long-term care services for older Virginians and their families. The Center will focus on counseling, problem-solving, mediation, and referral to appropriate community resources which can best meet the client's needs. Center staff will provide information and counseling to callers and will also follow-up on referrals to assure that the caller's needs were addressed. The Center will expand the Department's current toll free information number to become an elder rights hotline for older citizens and their families.

Profile of Older Virginians

The Department produced and disseminated *Envisioning the Future: The Changing Lives and Perspectives of Older Virginians*. This publication contains demographic data on older Virginians presented in a graphical format. The publication provides a profile of older Virginians and is designed to provide legislators, policy makers, service providers, and others with information about older Virginians that will allow them to better prepare for the growth of the aging population. A special profile advisory group, along with the PR Committee of the Commonwealth Council on Aging, provided input into the development of this publication. Copies of the profile are available from the Department.

Project with the Department for the Visually Handicapped

The Department partnered with the Virginia Department for the Visually Handicapped to place large print closed captioned television screens in each Area Agency on Aging. These screens allow older persons with vision impairments to read the small print found on bills, legal documents, letters, prescription bottles, etc. The Department hosted a media event on September 29th to highlight these new closed captioned TV screens. The Secretary of Health and Human Resources participated and joined Area Agency staff for training on the equipment which was provided through federal Older Blind Grant funds.

Project with the Attorney General's Office

The Commonwealth Council on Aging is partnering with the Office of the Attorney General to encourage older Virginians to volunteer as youth tutors and mentors. The Attorney General's Office has a registry of volunteer opportunities and will refer potential mentors to a program in their community where they can volunteer their time to assist youth. The Council will encourage older citizens to seek opportunities to share their wisdom and talents with young people in their communities.

Project with Virginia Health Information

The Department partnered with Virginia Health Information, Inc. (VHI) to produce two publications for consumers: *Long-Term Care: A Consumer's Guide* and *Long-Term Care: A Provider Directory*. The long-term care guide contains information about home care, community based services, and institutional based care available in Virginia. The provider directory lists home care providers, nursing homes, assisted living facilities, and continuing care facilities. Charges and hourly rates are listed for these providers. Copies of the two booklets are available from the Department.

Alzheimer's Commission Moved to the Department for the Aging

The Department enthusiastically welcomes the Alzheimer's Disease and Related Disorders Commission to our family of boards and commissions. This Commission consists of 14 members appointed by the Governor to serve in an advisory capacity to the Secretary of Health and Human Resources. The Commission is charged with developing a plan for funding local initiatives for services to persons with Alzheimer's Disease and related disorders.

Staff Member Honored

Cecily Slasor, Information Specialist with the Department's Center for Elder Rights, was honored recently as the Advocate of the Year by the Marriott Corporation's Brighton Gardens Assisted Living Facility. Ms. Slasor was one of a half dozen individuals, including physicians, nurses, nursing assistants, and other professionals, nominated by the facility's board. She was recognized for the caring and competent manner in which she carries out her work. Mrs. Slasor epitomizes the quality of staff at the Department, all of whom are strong advocates for older Virginians.

Additional information about these projects or publications is available from the Department by calling 1-800-552-3402.

[Back to Contents](#)

Focus on the Virginia Geriatric Education Center

Kathleen Watson

Kathleen Watson joined the Virginia Geriatric Education Center in mid-September as a Research Specialist. She is responsible for various projects connected to the 2000-2005 grant and assists other VGEC staff members with projects as well.

Kathleen received her Bachelor of Science degree in Administration of Justice and Public Safety from Virginia Commonwealth University in 1989. She then began a career in retail management, which she pursued until enrolling full time in the Master of Gerontology program at VCU. She was most recently a store manager for The Cosmetic Center, a specialty retailer of cosmetics and fragrances.

Kathleen always enjoyed the company of older adults, but the thought of working in the field of aging never occurred to her until she had the opportunity to serve as a caregiver for an aging relative here in Richmond. That experience motivated her to begin taking Gerontology

courses on a part time basis, as she saw the need for more people educated in aging issues to be employed in the field of aging. Her focus in the master's program is the Education Track; when she completes the program, Kathleen hopes to pursue a career in advocacy for the needs of the aging population and to educate the public about aging issues.

Kathleen grew up north of Richmond in Fauquier County, and has many fond memories of visiting her grandparents in Petersburg, where her mother grew up. She now lives in Henrico County with her husband, Jim, stepdaughter Kristen, and their four cats. When she is not busy with school work, she enjoys quality time at home with her family, spending time with friends, dining out, and keeping up with current events. She also enjoys traveling and hopes to travel extensively in the future.

Tameka Hill

Tameka Hill joined the staff of the Virginia Geriatric Education Center in June 2000 as temporary staff. In September she was hired on a full-time basis as Office Services Specialist. Her responsibilities include helping to maintain the statewide database for the Medication Management training program and performing daily tasks that keep the office in order.

Tameka graduated from Armstrong High School in 1999. She is currently enrolled at J. Sargeant Reynolds Community College where she is working toward her Associate in Science degree. After attaining her associate degree, she plans to transfer to Virginia Commonwealth University to complete her bachelor's degree.

In her free time Tameka operates her hand-made jewelry and personalized gift basket business. She also likes to cook, watch movies, and write screenplays and poetry

[Back to Contents](#)

Focus on the Virginia Center on Aging

Bonnie Sachs

Bonnie Sachs joined the Virginia Center on Aging (VCoA) in June as a Research Specialist. Her responsibilities include analyzing data and writing statistical reports for the Virginia Geriatric Education Center's telecourses, managing data collection and analyses for the Geriatric Interdisciplinary Team Training courses, and data entry for the Department of Social Services/VGEC contract to train Adult Care Residence employees. She also has assisted in writing grant proposals, namely "More Life Left to Live: Educating Older Adults about Healthy

and Unhealthy Lifestyles". Bonnie has also performed various duties relating to the Alzheimer's and Related Disease Research Award Fund.

Bonnie graduated summa cum laude from Virginia Tech in May 2000, earning a Bachelor's degree in Psychology. While attending Virginia Tech, Bonnie was president of Psi Chi, the National Honor Society in Psychology, as well as a member of several other honor societies such as Phi Beta Kappa, Omicron Delta Kappa and Phi Kappa Phi. Bonnie was also heavily involved in research during her undergraduate years in college. She was director of a physiological research lab at Virginia Tech, and researched and presented on various topics. In May 2000, she completed and successfully defended her Honor's Thesis. Bonnie was chosen to participate in a research internship program through the National Science Foundation.

Beginning next fall, Bonnie will be attending American University in Washington, D.C. She will be starting a Ph.D. program in Neuropsychology, and plans to specialize in neurodegenerative diseases.

Bonnie was born and raised in Richmond. She enjoys various outdoor activities, reading, being with friends and family, attending Va Tech football games (GO HOKIES!) and spending time with her boyfriend.

[Back to Contents](#)

Increasing Awareness and Knowledge of the Aging Field Among Virginia's Medical School Students

Angela G. Rothrock, M.S.

The Internal Medicine Student Conference was held at the Medical College of Virginia campus of Virginia Commonwealth University on December 2, 2000. This conference was hosted by Club Med, a medical student group at MCV/VCU whose faculty advisor is Dr. Casar Kanamori. One of the organization's primary goals is to increase awareness and knowledge in the field of geriatrics and gerontology.

Over 30 students from MCV/VCU, Eastern Virginia Medical School, and Georgetown University attended. Students heard presentations from University faculty on the topics of ethical decision making in the elderly population, dementia, delirium, depression, sexual dysfunction in the

elderly, and health policy and financial consideration in the elderly. Following the presentation, students were given an opportunity to practice "hands-on" physical exams and interviewing skills with simulated patients from Eastern Virginia Medical School. Geriatricians circulated throughout the workshop to offer assistance and helpful advice. The Virginia Geriatric Education Center coordinated the evaluation of the conference in order to assess its success in raising awareness and knowledge in the field of aging. Katherine Shew, a medical student at MCV/VCU, was the primary organizer of the conference. Dr. Peter Boling provided extensive help in planning the workshop. Dr. Boling is a strong advocate for increased emphasis on geriatrics and gerontology in the medical school. Dr. Boling and an interdisciplinary group of VCU colleagues recently applied for a Reynolds Foundation Grant to integrate geriatric education into the medical school curriculum at all levels of medicine here at MCV/VCU.

[Back to Contents](#)

In Memoriam

Albert E. Millar, Jr., Ph.D.

"Never be bored, and never be boring," was a motto of Dr. Albert Millar, known comfortably as "Al" by those privileged to work with him. This motto drove his life as an educator; and anyone fortunate enough to hear him speak knew that he accomplished this motto in the most distinguished fashion. He died on October 13, 2000 at the age of 59, after a long battle with cancer.

Dr. Millar was one of the Virginia Center on Aging's first lecturers at our Elderhostel lifelong learning program at the Chamberlin Hotel in Hampton. For almost a decade, he lectured on such diverse and intriguing topics as the writings of Edgar Allan Poe, the secret diaries of Civil War conspirators and other Victorians, and Chaucer's Canterbury Tales. He excelled as an instructor, raconteur and wit, charming audiences and fueling Elderhostelers' quest to learn. He remained one of the most popular lecturers of the program because of these qualities and his engaging and gracious manner of speaking. Moreover, he committed great energy to the program, sometimes teaching 10 courses a year for the VCoA.

Dr. Millar developed his love for literature at a very early age and became a faculty member in the Department of English at the Christopher Newport College while just in his mid-twenties. During his 35-year tenure, he contributed significantly to the academic life of the institution and toward its growth into a university. He had career-long interest in

early American literature, the writings of Edgar Allan Poe, and the Bible as literary text. On three occasions, Dr. Millar was selected as "Professor of the Year" by the student body.

We shall miss him.

[Back to Contents](#)

Medication Management Training Course

Dr. Mary Ann Kirkpatrick will be offering a Medication Management training course for pharmacists interested in becoming facility trainers on February 23, 2001 at the Omni-Charlottesville. Pharmacists interested in attending the session should contact Dr. Kirkpatrick (804-828-8077 by phone or mkirkpat@hsc.vcu.edu by e-mail). Registration is \$50.00 and is limited to the first 25 pharmacists.

[Back to Contents](#)

COMMONWEALTH OF VIRGINIA

Alzheimer's and Related Diseases Research Award Fund

FINAL PROJECT REPORTS FROM THE 1999-2000 ALZHEIMER'S RESEARCH AWARD FUND

The Alzheimer's and Related Diseases Research Award Fund (ARDRAF) was established by the Virginia General Assembly in 1982 to stimulate innovative investigations into Alzheimer's Disease along a variety of avenues, such as the causes, diagnosis, and treatment of the disorder; public policy and financing of care; and the social and psychological impacts of the disease upon the individual, family and community. ARDRAF conducts an annual competition for pilot study awards (currently \$25,000 each), administered by the Virginia Center on Aging at Virginia Commonwealth University.

GMU Giorgio Ascoli, Ph.D. (Krasnow Institute), "Effect of Dendritic Morphology on Neuronal Electrophysiology in a Lesion Model of Alzheimer's Disease"

An important neurobiological marker of Alzheimer's disease (AD) is the loss of neuronal cells and connections in the hippocampus. Because this brain structure is involved in memory formation, hippocampal damage has been the focus of animal models of AD. In particular, kainate lesions in the rat were shown to reproduce anatomical (dendritic elongation and branch loss) and biochemical (spread receptor distribution) correlates of AD. In this research project, the investigator examined a potential interaction between anatomical and physiological effects of kainate

lesions in hippocampal neurons, characterizing the kainate-induced modifications of pyramidal cell dendritic morphology as well as the electrophysiological changes induced by these anatomical modifications. Results indicated that, although the kainate-lesioned neurons are structurally different from both young and aged control neurons, the electrophysiological behavior emerging from these three groups is much less differentiated. In other words, changes in dendritic morphology similar to those observed in AD are sufficient to induce only minimal quantitative (and no qualitative) alterations of neuronal activity. The researchers concluded that the electrophysiological impairment observed in AD and kainate-lesioned neurons requires both anatomical and biochemical changes to be fully explained. The results indicate a need for more extensive studies and larger pools of neurons to shed light on the mutual interactions between morphological and biochemical influences on neuronal activity. (Dr. Ascoli can be reached at 703/993-4383)

UVA Suzanne Holroyd, M.D. (Dept. of Psychiatric Medicine) & Andrew Wolf, M.D. (Dept. of Internal Medicine), "Attitudes on Whether Physicians Should Tell Alzheimer's Disease Patients Their Diagnosis"

There is no established protocol to guide physicians who diagnose dementing illnesses such as Alzheimer's disease (AD) about informing patients of their diagnosis. There are multiple dilemmas and difficulties related to when and how to deliver the diagnosis that pose challenges for both clinicians and families. This study surveyed elderly patients without dementing illness and family members of patients with AD regarding their attitudes towards being given the diagnosis of AD. Responses from clinic outpatients representing diverse racial and socioeconomic backgrounds were compared to preliminary data from predominantly white older adults residing in an upscale retirement community. A significantly greater proportion of respondents in the more diverse sample indicated that they would prefer to be informed of the diagnosis (92% vs. 79.5%), even though significantly fewer of them reported having relatives or close friends with AD or a similar illness (21.5% vs. 48.7%). Surveys of family members of patients with AD indicated that while the vast majority of caregivers had been told of the diagnosis, only half of the patients had been informed. More than three-quarters of respondents agreed that patients should be told when they are diagnosed with a disease that affects memory and thinking. The level of their care recipients' cognitive impairment distinguished between those who agreed and disagreed. The results of this study lend support to the guidelines recently released by the American Medical Association advocating that patients be directly informed when a dementing illness is diagnosed. (Drs. Holroyd and Wolf

can be reached at 804/924-2241)

VA Tech Shannon E. Jarrott, Ph.D. (Dept. of Human Development), "The Effects of Instrumental Assistance on Family Caregivers of Patients with Dementia"

Caring for an elderly relative with a dementing illness has consistently been associated with increased levels of overload and decreased well-being. Caregivers may turn to informal (family and friends) and formal (paid) sources for assistance with the care of their relative, but often with mixed results. The present study examined how the amount and types of help dementia family caregivers receive affected caregiver stress and well-being (e.g., depression, anger, overload, and worry). Rather than relying on subjective caregiver evaluations, this study utilized multiple objective measures of the nature and extent of assistance that urban and rural caregivers receive. Results indicated that higher baseline levels of formal, but not informal, help was associated with lower caregiver distress. Greater formal assistance with the activities of daily living (ADLs) was the type of help most strongly associated with lower distress. Although gains in informal help across time were associated with lower depression, changes in the levels of formal help were not related to caregiver distress. Higher levels of conflict associated with formal helpers buffered the effects of increased formal assistance and resulted in higher caregiver distress. It is suggested that even mild conflict has an important negative effect on caregivers. Support programs that provide appropriate and acceptable assistance are warranted. (Dr. Jarrott can be reached at 540/231-5434)

UVA Virginia Simnad, M.D. (Dept. of Neurology), "Alteration in Proton Spectra of the Hippocampus to Oral Ingestion of Glucose in Alzheimer's Disease"

Alzheimer's disease is accompanied by atrophy or a decrease in brain tissue particularly in the hippocampus. Neurochemical changes also take place, although, until recently, it has been difficult to view these changes in living individuals. Magnetic Resonance Spectroscopy (MRS) is a new technology which identifies chemical activity in the brain in a safe non-invasive manner. This is accomplished using the same magnet that is used for magnetic resonance imaging (MRI) which identifies brain structures. This study examined chemical activity in the hippocampus, a brain area critically affected by Alzheimer's disease. Significant differences were observed in the brain patterns exhibited by Alzheimer's patients, healthy elderly, and healthy young people. N-acetyl-aspartate, a chemical associated with energy production and neuronal viability, was lowest in the Alzheimer's patients, followed by somewhat higher levels among the

healthy elderly, with highest levels of the compound in the healthy young participants. Current investigations are examining the relationship between cognitive functioning and chemical concentrations in the hippocampus. (Dr. Simnad can be reached at 804/243-5931)

VCU Patricia W. Slattum, Pharm.D., Ph.D. & Vivien E. James, Pharm.D. (Dept. of Pharmacy and Pharmaceutics), "Anticholinergic Medication Use in Elderly Patients Diagnosed with Dementia or Taking Acetylcholinesterase Inhibitors"

Age- and disease-related changes in the cholinergic nervous system contribute to the functional decline, memory impairment and worsening quality of life observed in Alzheimer's (AD) patients. Administration of anticholinergic medications could result in further adverse consequences in these patients. A wide variety of anticholinergic medications are used to treat conditions comorbid with AD, including Parkinson's disease, incontinence, depression, abdominal cramps, and allergies.

Acetylcholinesterase inhibitors, such as donepezil (Aricept[®]) and tacrine (Cognex[®]), increase levels of acetylcholine in the central nervous system and improve cognition in some patients with AD. Co-administration of central anticholinergic agents should counteract these effects, reducing the potential benefit of either agent. This study assessed the use of prescribed anticholinergic medications in a Medicare Supplemental insured population and in elderly patients treated in a large group family physician practice. Patients were evaluated for anticholinergic medication use and presence of AD or other dementia. Concurrent use of anticholinergics and acetylcholinesterase inhibitors was also determined. Review of insurance claims revealed that 12.0% of patients with dementia and 13.4% of patients taking acetylcholinesterase inhibitors received anticholinergic medications known to have significant effects in the central nervous system, compared to 10.0% of elderly patients without dementia. Review of charts in the group family practice showed that 41% of dementia patients and 56% of patients taking acetylcholinesterase inhibitors received a medication with some degree of anticholinergic effects, compared to 19% of elderly patients without dementia. Results of this study suggest that patients at high risk for anticholinergic adverse events, particularly those with dementia, continue to receive anticholinergic drugs inappropriately. Drug-drug interactions may be lessening the intended therapeutic effect of the Alzheimer's medication. Increased attention to this problem is needed. (Drs. Slattum and James can be reached at 804/828-6355)

To receive the 2000-2001 ARDRAF Call for Proposals please call the Virginia Center on Aging (804) 828-1525 and give us your name, mailing

address, phone number, and e-mail.

COMMONWEALTH OF VIRGINIA

Alzheimer's and Related Diseases Research Award Fund

THE VIRGINIA CENTER ON AGING VIRGINIA COMMONWEALTH UNIVERSITY

Purpose: The Commonwealth of Virginia established the Award Fund in 1982 to promote research into Alzheimer's and related diseases. Because of a commitment to program balance, the Fund encourages scientifically rigorous applications from a broad spectrum of disciplines. Studies may involve:

- (1) the underlying causes, epidemiology, diagnosis, or treatment of Alzheimer's and related diseases;
- (2) policies, programs, and financing for care and support of those affected by Alzheimer's and related diseases; or
- (3) the social and psychological impacts of Alzheimer's and related diseases upon the individual, family, and community.

Funding: The size of awards varies, but is limited to \$25,000 each. Number of awards is contingent upon available funds.

Eligibility: Applicants must be affiliated with colleges or universities, research institutes, or other not-for-profit organizations located in Virginia. The Fund encourages partnerships between community-based agencies/facilities and academic institutions.

Schedule: We request a non-binding letter of intent with tentative title, non-technical abstract, and a 4-5 sentence description of the project in common, everyday language for press release purposes by March 6, 2001. Applications will be accepted through April 2, 2001, and applicants will be notified by June 21, 2001. The funding period begins July 1, 2001 and project must be completed by June 30, 2002.

Review: Proposals will be reviewed for scientific merit by three qualified technical reviewers, one of whom is identified by the applicant. The Awards Committee will make the final funding decision.

Application: Application forms, guidelines, and further information may be obtained on the World Wide Web (<http://views.vcu.edu/vcoa/ardraf.htm>) or by contacting:

[Back to Contents](#)

Constance L. Coogle, Ph.D.
Alzheimer's & Related Diseases Research Award Fund
Virginia Center on Aging
P. O. Box 980229
Richmond, Virginia 23298-0229
Phone: (804) 828-1525
Voice Mail: (804) 278-2283
FAX: (804) 828-7905
E-Mail: ccoogle@hsc.vcu.edu

[Back to Contents](#)

Virginia Commonwealth University Department of Gerontology Spring 2001 Courses

12196 002 GRTY 410 Intro to Gerontology Welleford Tues/Thurs 8:00-9:15 BUSN 2114

12197 901 GRTY 410 Intro to Gerontology Ansello Wed 6:00-8:40 LYONS B2

12198 901 GRTY 601 Bio.& Physio. Aging Harkins Wed 5:00-7:40 SANGER 6-032

12200 901 GRTY 604 Problems Issues & Trends Cotter Thurs 6:00-8:40 LYONS B2

12202 901 GRTY 607 Field Study in Gerontology Parham

15912 901 GRTY 624 Comm/Comm Svc for Eld Osgood Thurs 4:00-6:40pm RADM 120

12204 901 GRTY 638 Long-term Care Admin. Rachel/Sluga Tues 7:00-9:40 LYONS B2

12205 901 GRTY 641 Survey Psy. Access & Trtmt H. Wood Tues 6:00-8:40 RADM 120

12206 901 GRTY 642 Practicum: Geropsy Parham

12207 901 GRTY 691 Research Method II Owens Mon 6:00-8:40
LYONS B2

12208 801 GRTY 692 Independent Study Parham

12209 802 GRTY 692 Independent Study Harkins

12210 803 GRTY 692 Independent Study Osgood

12211 804 GRTY 692 Independent Study Welleford

12212 001 GRTY 792 Ind. Stdy for MS/Ph.D. Welleford

12213 002 GRTY 792 Ind. Stdy for MS/Ph.D. Parham

12214 003 GRTY 792 Ind. Stdy for MS/Ph.D. Harkins

12215 004 GRTY 792 Ind. Stdy for MS/Ph.D. Osgood

12216 801 GRTY 798 Thesis Parham

12217 801 GRTY 799 Thesis Parham

OFF CAMPUS COURSES

12201 C01 GRTY 606 Aging & Human Values Norton -- Video-Assisted

VIDEO COURSES

15387 001 GRTY 602 Psychology of Aging Welleford -- Video-Assisted

15914 001 GRTY 604 Problems Issues & Trends Pyles/Cotter -- Video-Assisted

15911 001 GRTY 605 Social Gerontology Osgood -- Video-Assisted

[Back to Contents](#)

Calendar of Events

January 16, 2001

Virginia Center on Aging's Legislative Breakfast. Annual gathering to report to the General Assembly and colleagues. St. Paul's Episcopal Church, Richmond, VA. For info contact (804) 828-1525.

February 8-9, 2001

Alzheimer's Gene Discovery to Therapeutic Applications. International Business Conferences 9th Annual Alzheimer's Conference. The W Hotel, Atlanta, GA. For info go to www.ibcusa.com

February 22-25, 2001

Capitalizing on Professional and Cultural Diversity to Benefit Older Adults. 27th Annual Meeting and Educational Leadership Conference of the Assoc. for Gerontology in Higher Education. Fairmont Hotel, San Jose, CA. For info contact (336) 758-4665 or longino@wfu.edu

February 26-28, 2001

Older Adults, Health Information and the World Wide Web. 2nd Biennial SPRY Conference Natcher Center National Institutes of Health, Bethesda, MD. For info contact (202) 216-0401 or www.spry.org

March 8-11, 2001

Designing Our Future. Joint Conference of the American Society on Aging and The National Council on Aging. New Orleans, LA. For info contact (800) 537-9728 or www.asaging.org

March 26-27, 2001

Guardianship In Virginia a Decade of Growth 10th Annual Conference of the Virginia Guardianship Association. Charlottesville Hotel, Charlottesville, VA. For info contact Michelle Utterback (804) 828-9662 or mutterba@hsc.vcu.edu

April 4-7, 2001

Aging's Traditions, Transitions, Technologies: The Southern Touch. 22nd Annual Meeting of the Southern Gerontological Society. Marriott's Griffin Gate Resort, Lexington, KY. For info contact (423) 439-6275 or lloyd@atsu.edu

June 28-July 1, 2001

Care/Case Management: Who Needs It? 5th International Care/Case Management Conference. Presented by the Learning Center of the American Society on Aging. Sheraton Wall Centre, Vancouver, British Columbia, Canada. For info contact (415) 974-9600, info@asaging.org or www.asaging.org

July 1-6, 2001

Global Aging: Working Together in a Changing World. 17th Congress of the International Association of Gerontology. Vancouver Convention and Exhibition Centre, Vancouver, British Columbia, Canada. For info go to www.harbour.sfu.ca/iag/

July 7-11, 2001

2001: An Aging Odyssey. 26th Annual Conference of the National Association of Area Agencies on Aging. Boston Park Plaza Hotel, Boston, MA. For info contact (202) 296-8130 or www.n4a.org

July 15-18, 2001

New Directions in Alzheimer's Care. 10th National Alzheimer's Disease Education Conference from the Alzheimer's Association. Hyatt Regency Chicago, Chicago, IL. For info contact (312) 335-5790 or www.alz.org

October 4-5, 2001

Aging Well in Rural Areas. 2001 West Virginia Conference on Aging. Presented by West Virginia University Center on Aging. Lakeview Scanticon Resort, Morgantown, WV. For info contact (304) 293-0628 or www.hsc.wvu.edu/coa/