

Annual Report
Of the
Virginia Center on Aging
Virginia Commonwealth University
www.vcu.edu/vcoa

Accomplishments in 2003

And

Goals for 2004

Overview

This report summarizes activities of the Virginia Center on Aging (VCoA) during calendar 2003. March marked our 25th anniversary date. This report is organized by calendar year because of the practice of providing an annual report to the Virginia General Assembly when it convenes in January.

We did meet all 12 of our Goals for 2003 despite another reduction in our appropriation from the General Assembly and the major disruption caused by Hurricane Isabel in September. This storm caused cancellations and postponements (including the long-planned Governor's Conference on Aging). That we succeeded despite financial and weather setbacks gives credit to the ingenuity and hard work of VCoA's staff.

In the enabling legislation, VCoA was charged with 10 responsibilities, encompassing three principal functions: 1) interdisciplinary studies, including training in aging-related topics and the education of older adults; 2) research; and 3) information sharing. VCoA maintains a statewide commitment, conducting at least one of its three principal functions in all five geographic regions of Virginia every year. We annually list agencies and businesses that we have worked with by geographic region. In calendar year 2003, VCoA worked with at least **321** regional entities, **38** statewide departments, coalitions, and non-profit organizations, and **33** units of Virginia Commonwealth University (VCU) in satisfying its legislated mandates. (See *Appendix A for a listing of those we worked with.*) These partnerships enabled us to accomplish our work, augmenting our staffing level and compensating somewhat for decreases in our funding streams.

In calendar 2003 the Virginia Center on Aging's annualized appropriation from the General Assembly of \$290,500 produced \$1,632,000 in non-state grants; non-resident Elderhostel tuition, course related expenditures and discretionary spending by our Elderhostelers; and documented ARDRAF seed grant consequences. In other words, for every dollar that the General Assembly invested in the Virginia Center on Aging, we generated \$5.63 in direct economic returns.

Mission

The General Assembly, in creating the Virginia Center on Aging by amendment to the Code of Virginia in 1978, charged it to be **“an interdisciplinary study, research, (and) information and resource facility for the Commonwealth of Virginia...”** It is the only such Center in the Commonwealth.

The Virginia Center on Aging (VCoA) is satisfying its mandate from the General Assembly and is operating across Virginia, in a statewide capacity. Characteristically, the VCoA is accomplishing its activities through partnerships with various units, both across the Commonwealth and within Virginia Commonwealth University. VCoA believes that these partnerships serve the aging-related needs of Virginia in a most cost-effective manner and broaden the capacity of units within VCU and across Virginia to conduct aging-related research, education, and community service.

Under “interdisciplinary study,” the General Assembly’s mandate includes:

- Continuing education and in-service training for those who work with the elderly
- Education and training of older persons
- Educational preparation of non-gerontology students

Under “research,” the General Assembly’s mandate includes:

- Conduct of research in the field of gerontology
- Dissemination of research findings

Under “information and resource facility,” the General Assembly’s mandate includes:

- Collection and maintenance of data about older persons statewide and regionally
- Serving as a resource to the State Office on Aging (now called the Virginia Department for the Aging) and to all organizations and state agencies involved in aging-related planning and service delivery

In 1982 the General Assembly also charged VCoA with responsibility for administering the **Alzheimer’s and Related Diseases Research Award Fund (ARDRAF)** as a stimulus for research into the causes, consequences and treatments of dementing illnesses.

Activities in 2003

During calendar 2003 the Virginia Center on Aging interacted and collaborated with colleagues in state, regional, and local agencies and organizations, both public and private, with businesses, and with units of Virginia Commonwealth University, in order to achieve its responsibilities.

The following are representative activities:

- ❖ VCoA concluded a yearlong series of educational programs (mid-2002 to mid-2003) in celebration of its 25th anniversary. Governor Mark Warner issued a proclamation declaring March 23, 2003, the 25th anniversary of Governor John Dalton's signing the legislation creating us, as "Virginia Center on Aging Day in the Commonwealth of Virginia."
- ❖ VCoA and the VCU Police Department, both members of the Central Virginia Task Force on Older Battered Women, conducted a training project for law enforcement and domestic violence agency personnel on abuse, exploitation and violence against older women. The project, supported by a grant from the Virginia Department of Criminal Justice Services, administering federal funds, met its objectives and has been re-funded for calendar 2004.
- ❖ VCoA is a member of the project, *Abuse and Neglect of Children and Adults with Developmental Disabilities: A Problem of National Significance*. This is a federally funded grant initiative, directed by the Partnership for People with Disabilities at VCU, to develop a web-based course for health care professionals. During calendar 2003, the project produced, field-tested, and refined 13 interactive modules, including Scope and Significance of the Problem, Disabilities and Communication, Risk Factors, Special Considerations in the Use of Medications, Assessment and Documentation, and Reporting and Testifying. Following additional updates and improvements, the modules are scheduled for national availability in mid-2004.
- ❖ VCoA enrolled 2143 people in its 63 VCU Elderhostel and Lifelong Learning programs in 2003.
- ❖ VCoA conducted 58 Elderhostel residential programs at four different sites in Virginia – Richmond, Natural Bridge, Hampton/Yorktown and Richmond/Petersburg – for a total enrollment of 1776 older adults. VCU Elderhostel was ranked 16th in total enrollments out of approximately 700 Elderhostel provider organizations across the United States. It has been

the largest provider of Elderhostel learning programs in Virginia each year since 2001.

- ❖ VCoA offered four Lifelong Learning programs, one at Virginia Beach, one in southwest Virginia at Big Stone Gap for Mountain Empire Older Citizens, and two at Kendal of Lexington, drawing a total attendance of 215 older learners.
- ❖ VCoA and Brandermill Woods Foundation welcomed 152 people to a series of short lectures at an Open House in December for the inauguration of their co-sponsored Lifelong Learning Institute in Chesterfield.
- ❖ VCoA continued its partnership in the VCU School of Dentistry to help prepare dentists for geriatric practice, addressing upper level students on health, family, disability, and other characteristics with implications for dental practice.
- ❖ VCoA lent Virginians some 160 films from its audiovisual collection to individuals, groups, agencies, and organizations across the Commonwealth, including nursing home staffs, family caregivers, and instructors in secondary and post-secondary education.
- ❖ VCoA's alliance with the Alzheimer's Association Chapter network proved to be invaluable in 2003, reducing the impact of the General Assembly's cut to the Alzheimer's and Related Diseases Research Award Fund (ARDRAF) through a generous contribution to ARDRAF by the Richmond chapter. VCoA continues to encourage applicants to involve the Virginia Chapters in substantive and meaningful ways as they develop their proposals to the ARDRAF.
- ❖ VCoA lent its expertise to assist others to develop partnered grant proposals seeking research and training funds from non-state sources. These included assistance to: the Partnership for People with Disabilities in a proposal on the mistreatment of people with disabilities to the Robert Wood Johnson Foundation; the Central Virginia Task Force on Older Battered Women in a proposal on abuse and sexual assault against older women to the U.S. Department of Justice; the Senior Center of Richmond on evidence-based disease management among elders; the Department of Neurology at the University of Virginia in a proposal to the National Institute on Aging to create an Alzheimer's Disease Research Center; and the Virginia Geriatric Education Center in a proposal to the Bureau of Health Professions of the U.S. Department of Health and Human Services on supplementary support for the VGEC.

- ❖ VCoA continued to serve as a member of the Virginia Arthritis Task Force (VATF), which, during 2003, began developing the next steps to the VATF Action Plan Prioritization. Priorities set included increasing public awareness of the signs of arthritis, encouraging early professional diagnosis, and improving self-management skills.
- ❖ VCoA partnered in 2003 with the Richmond Commonwealth Attorney's Office, the Richmond Police Department, and the Richmond Domestic Violence Coordinating Committee to develop and submit a proposal to the Office for Victims of Crime for support of a Domestic Violence and Sexual Assault in Later Life conference in conjunction with National Crime Victims' Rights Week in April 2004.
- ❖ VCoA's work since 1999 to help establish a needed senior center in Chesterfield County, which culminated in the grand opening in June 2002 of the Senior Center of Richmond at Chesterfield, has entered the expansion phase. The center, located in Midlothian, has already exceeded its growth projections and directors are exploring other sites for its future. The senior center receives support from the Chesterfield County Board of Supervisors and from community businesses, organizations, and individuals.
- ❖ VCoA staff's presentations at professional meetings and publications in professional journals numbered at least 15 overall in 2003, including "The Alzheimer's and Related Diseases Research Award Fund: Productive Support for Innovative Investigations in Virginia," presented at the 24th Annual Meeting of the Southern Gerontological Society in Richmond in April, which brought back Ruth Finley, ARDRAF's original administrator, as a co-presenter.
- ❖ VCoA has been working with the Brandermill Woods Foundation, the Brandermill Woods Retirement Community, and others since 2002 to establish a Lifelong Learning Institute (LLI) in Chesterfield County. This institute, modeled as an Elderhostel Institute and sponsored officially by VCoA, would engage VCU retired professors, professionals and others in metropolitan Richmond as peer instructors to older adults. The Chesterfield Board of Supervisors, Chesterfield Public Schools System, Brandermill Woods Foundation, and other organizations have committed personnel and resources to development of the LLI. Organizational and instructional development culminated in an Open House with introductory lectures and ribbon-cutting ceremony with Chesterfield County dignitaries in December. Classes will begin in March 2004 at the Watkins Annex Building in Midlothian.

- ❖ VCoA partnered with statewide aging-related organizations in order to provide research findings and training for professionals across Virginia. VCoA co-sponsored the Ninth Annual Conference of the Virginia Coalition for the Prevention of Elder Abuse, in Virginia Beach in June; the Governor's Conference on Aging, in Richmond in November; and the 2003 Conference of the Virginia Coalition for the Aging, in Fredericksburg in December.
- ❖ VCoA has two commissioners on the Commonwealth of Virginia Alzheimer's Disease and Related Disorders Commission. The Commission has formed several Work Groups who are actively engaged in the development of a strategic business plan that would establish and support a virtual statewide Comprehensive Alzheimer's Disease Center. VCoA's members are chairing the Databases Work Group, charged with developing a statewide bio-informatics system to include clinical, public health, and epidemiological databases as a resource for research on services utilization, and the Training and Education Work Group, charged with establishing a Commonwealth-wide program to disseminate well-validated knowledge on diagnosis, treatments, care, services, programs, resources or other practical information to various consumers, including family members, care providers, community leaders, primary care physicians, staff of long term care and assisted living facilities, and others.
- ❖ VCoA offered several training presentations on combating domestic violence against older women, including: *Safe and Successful Aging for Older Battered Women*, at the Southern Gerontological Society Conference, in Richmond in April; *Domestic Violence and Sexual Assault in Later Life: Implications for Social Work Practice*, at the Virginia Alliance of Social Work Practitioners Conference, in Richmond in May; *Domestic Violence and Sexual Abuse in Later Life*, co-presented with Hanover Safe Place, at the Ashland Police Department In-service in September; and *Domestic Violence and Sexual Abuse in Later Life*, at the VCU Police Academy in September.
- ❖ VCoA, in partnership with the Virginia Department for the Aging, submitted a proposal to the AARP Foundation/National Legal Training Project and received a grant to provide training on domestic violence in later life and on coalition building, to be offered in spring 2004.
- ❖ VCoA served on the Elder Abuse Advisory Group, Family Violence Subcommittee of the Virginia State Crime Commission.

- ❖ VCoA served until August as a continuing member of the Henrico Elderly Mental Retardation Task Force to assess needs and design strategies to assist both those who age with mental retardation and their family caregivers. In August VCoA helped to launch its successor, the Area Planning and Services Committee (APSC) on Aging with Developmental Disabilities, a broad coalition of family caregivers and leaders across metropolitan Richmond in disabilities, health care, aging services, communities of faith, parks and recreation, and more.
- ❖ VCoA again fielded an energetic team of fund-raising walkers for the annual fall Memory Walk benefiting the Alzheimer's Association – Greater Richmond Chapter.
- ❖ VCoA co-represented Virginia Commonwealth University in meetings during 2003 to refine the course of development of The Center for Excellence in Aging and Geriatric Health, in Williamsburg. This Center would join academic, clinical practice, and human services entities in creating a model community to promote well-being among older adults.
- ❖ VCoA continued to seek support for a Statewide Survey of Older Virginians, last conducted in 1979-80, as a means of generating current information about their health, socioeconomic status, family caregiving responsibilities, use of community resources, and other indices of well-being not assessed in the 2000 U.S. Census, so that Virginia can anticipate effects of the aging of its citizenry.
- ❖ VCoA continued its initiative to educate clergy and lay leaders in communities of faith in matters of aging and wellness, conducting programs for older adult ministries in Glen Allen, Midlothian, and Richmond.
- ❖ VCoA co-sponsored or promoted the 2003 Belle Boone Beard Gerontology Conference, in Lynchburg in June; the Women's Health Virginia Sixth Annual Conference on Women's Health, in Charlottesville in June; and the Good Grief Conference, in Richmond in October.
- ❖ VCoA continued its education and training work on lifelong disabilities, conducting workshops on "intersystem partnering" for direct service providers and family caregivers at Lord Fairfax Community College in Middletown in July, co-sponsored by The Arc of the United States and The Arc of Northern Shenandoah Valley; and on "opportunities and challenges in growing older with lifelong disabilities" for directors and leaders of Virginia's community services boards at the 2003 annual conference of the

Virginia Association of Community Services Boards, at Wintergreen Resort in October.

- ❖ VCU Elderhostel, offered by VCoA, increased its Elderhostel enrollments by 5% in 2003, and was one of only a handful of Elderhostel sites in the country that saw increased enrollments for 2003, as, nationally, Elderhostel enrollments decreased by 14%.
- ❖ VCoA staff gave substantial services to Virginia's agencies and citizens by serving on the boards of some 16 non-profit organizations, providing leadership, technical assistance, and *pro bono* services to groups such as the Shepherd's Center of Richmond, the Senior Center of Richmond, the Alzheimer's Association, and the Central Virginia Coalition for Quality End-of-Life Care.

Short recaps of selected activities in 2003 follow, organized according to the respective mandate from the General Assembly:

a. Interdisciplinary Studies

- Domestic Violence Against Aging Women. VCoA co-developed and implemented with the Central Virginia Task Force on Older Battered Women a grant-funded project supported by the Virginia Department of Criminal Justice Services. Partnering VCoA and the VCU Police Department, the project developed specialized resources and training programs on domestic violence and sexual abuse against older women, and conducted related training throughout calendar 2003 with law enforcement agencies in Richmond, and in Chesterfield, Hanover, and Henrico counties. The project designed and implemented seven focus groups to assess the status and response to the needs of older women who are victims of domestic violence. The focus groups were composed of domestic violence advocates, aging-related service providers, Department of Social Services social workers, law enforcement and criminal justice personnel, older women, and older victims of domestic violence. The project also provided training at several conferences and police academies in the Richmond region, and offered presentations of project activities at the following meetings: Hanover Family Violence Summit, Hanover Safe Place staff meeting, Hanover Triad, Richmond Domestic Violence Coordinating Committee, Henrico County Coalition Against Domestic Violence, Richmond YWCA in-service, Senior Connections Care Coordinators Meeting, and Virginia Healthcare Ministries Association. The project has been competitively re-funded for operation throughout calendar 2004 as well.

- Elderhostel and Lifelong Learning Programs. VCoA has developed its Elderhostel education for older adults into a major initiative with an international reputation. Operating learning sites in Hampton/Yorktown, Natural Bridge, Richmond, and Richmond/Petersburg, VCoA attracted 2,143 older adults to its 63 weeklong, short-term, and Love of Learning programs. Elderhostelers from outside of Virginia since 1992 have brought approximately \$1 million annually to Virginia's economy through related tuition, lodging, instructors' salary, restaurant, museum, charter bus, and other expenses, and their discretionary spending. In 2003, Elderhostelers from outside of Virginia spent some \$735,000 in Virginia because of VCoA's Elderhostel program.

- Technology Opportunities Program. VCoA is a principal partner, with SeniorNavigator, VDA, V4A, and others, in the Technology Opportunities Program (TOP) Grant Planning Group that began collaborating in April 2003 for a grant proposal submission in Spring 2004 to the U.S. Department of Commerce. This group is a coalition of agencies committed to improving long-term care through innovative technologies in nursing homes across Virginia. At this point in development, the group is proposing computer technologies for residents and their families to help develop new family councils and strengthen existing councils, a new web site dedicated to family council development, and information on general long-term care issues, quality data, relevant policy and regulations, and best practice ideas and resources shared by other family councils, plus web-site bulletin boards, self-training modules for content learning and skill development, and other innovations.

- Healthy and Unhealthy Lifestyles in Later Life. VCoA and the VCU Department of Gerontology received funding in mid-2001 from the Delaware Division of Services for Aging and Adults with Physical Disabilities for a multi-part project to help older adults who wish assistance to break unhealthy habits. The project, entitled *More Life Left to Live: Educating Older Adults About Healthy and Unhealthy Lifestyles*, continued its work throughout 2003 and is likely to continue into late 2004. The project staff developed and obtained IRB approval for content for a statewide survey of older Delawareans to document the need for health promotion and disease prevention education, and will construct a special statewide model education and prevention program for older adults and service professionals in aging, health, mental health, and substance abuse. This model intervention uses a "train the trainer" approach to broaden the project's impact, and content will address such unhealthy behaviors as compulsive gambling, smoking, alcoholism, depression, and suicidal ideation. The project has produced a 25-minute video, "More Life To Live," that illustrates how the process of change in addiction is predicated on the principles of behavioral substitution. Viewers learn about the "protective factors" that decrease the risk of destructive behaviors in older adults. The project booklets (one targeted to service providers and the other to older adults) are close to being finalized and the evaluation instrument to be used in the training has been drafted.

b. Research

- Alzheimer's and Related Diseases Research Award Fund. VCoA manages this seed grant program for the Commonwealth without administrative cost. ARDRAF appropriations support promising lines of inquiry by Virginia researchers into clinical, biochemical, behavioral, pharmaceutical, and other aspects of dementing illnesses, in order to better understand their causes, consequences, and treatment. In 2003, the General Assembly decreased the ARDRAF appropriation to \$77,500 annually. The state appropriation was sufficient to support one award to UVA and two awards to Virginia Tech. UVA's study is using two sophisticated and ground-breaking techniques to identify and examine pathologically impaired or vulnerable neurons in AD and age-matched control brain regions. The Department of Sociology at Virginia Tech is exploring how gender influences the experiences of spousal caregiving, using in-depth interview data from a predominately rural sample. In a different award, investigators in the Departments of Human Development and Horticulture at Virginia Tech are collaborating to determine the positive influences of horticulture therapy upon persons with dementia in adult day services and nursing homes. A generous one-time gift from the Alzheimer's Association-Greater Richmond Chapter made a fourth ARDRAF award possible. In this study, ODU is using DSS adult protective services data to document differences between advantaged and disadvantaged neighborhoods regarding the incidence of elder abuse and caregiver burden in families dealing with dementia. The study will also demonstrate whether services provided to families caring for those with Alzheimer's are distributed equally across neighborhoods. *(See Appendix B for summaries of the 2003-2004 awards and the review committee and Appendix C for abstracts of the Final Reports of the 2002-2003 ARDRAF awardees)*
- Medicaid Waiver Personal Care Attendants (PCA) and Certified Nursing Assistant (CNA) Training and Professionalization Initiative. VCoA's Associate Director of Research is conducting evaluation on this contract from the Department of Medical Assistance Services to the VGEC. This two-year project is designed to train and offer opportunities for professionalization to a cadre of 400 personal care attendants and nurse aides who provide home care to Medicaid waiver recipients. The overall focus of the training is the development of care management and other career-related skills. During calendar year 2003 we have been collecting data to document the results of the statewide training and evaluate changes in job satisfaction/career commitment. We are currently collecting follow-up data to discover the extent to which the intervention has enabled trainees to better handle challenging situations and whether

their work situations have improved as a consequence of the training. Preliminary data from the first year are promising.

- Virginia Geriatric Education Center (VGEC) Core Grant. VCoA is partnering in this five- year (2000-2005) grant project, directed by the VCU Department of Gerontology and funded by the Bureau of Health Professions, Health Resources and Services Administration, USDHHS. VCoA is directing evaluation of each objective to improve the training in geriatrics of pre-service and in-practice health professionals, including curriculum development, faculty and practitioner training, and the clinical training of students. Featured initiatives in this grant project include a Geriatric Health Professional Mentoring Program, a Kids Into Health Careers Partnership, and Geriatric Case Management. VCoA's Associate Director of Research became Co-Principal Investigator (with Dr. James J. Cotter in the Department of Gerontology) on the research component of the Geriatric Health Professionals Mentoring Program. They are determining the main effect of the program, comparing responses provided by mentors and protégés, and measuring the effect of intervening or moderator (personality) variables. Their study will examine the experiences of mentors in training and those they mentor, documenting the functionality of the mentoring relationship, as well as changes in professional commitment and career satisfaction.
- Dementia-Specific Training of Long-Term Care Personnel. VCoA and the VGEC, in partnership with the Virginia Department for the Aging (VDA), the Alzheimer's Association Chapters, and the Nursing Assistant Institute (NAI), have been evaluating and reformulating a progressive training project that is designed to increase the knowledge and skills regarding dementia of those who work in long-term care settings, especially those who deliver most of the hands on care. Originally the project was conceptualized as three phases, with related objectives and responsible partners: Phase I, completed in 2002, provide dementia-specific training to as many as 1,000 long-term care personnel (Alzheimer's Association); Phase II, prepare 500 nursing assistants who have participated in the dementia program to provide in-services for their co-workers (VDA/NAI/Alzheimer's Association); and Phase III, offer 40 hours of job-focused training for 100 nursing assistants who successfully complete both the dementia-specific program and the train-the-trainer instruction (VGEC). In Phase I, VCoA submitted preliminary and final reports to the Alzheimer's Association analyzing results from delivery of a 12-hour curriculum on Person-Centered Care to 1,000 employees working in long-term care. In Phase II, VCoA received post-training data from the approximately 100 participants (rather than the anticipated 500) who had train-the-trainer instruction from the NAI. VCoA completed data entry and

analyses, and is currently preparing the final report. Insufficient response in Phase II from those who received training has caused Phase III to be suspended.

c. **Information and Resource Sharing.**

- Community Dissemination. VCoA completed a variety of community-based efforts to disseminate aging-related data and resources, as well as information about its research and training, current and future lifelong learning and Elderhostel programs. These included an hour-long radio program on aging issues broadcast from studios in the Northern Neck and participation as a presenter or an exhibitor at a dozen local conferences, fairs, workshops, and special events, in places across the Commonwealth. Venues included Senior Day at the Hanover County Parks and Recreation Center, the Chesterfield County Fair, and the Crater District Senior Day in Colonial Heights.
- Web Page ([http:// views.vcu.edu/vcoa](http://views.vcu.edu/vcoa)). VCoA continued to upgrade its web page during calendar 2003. The web page contains the main features of each quarterly issue of *Age in Action* since fall 1997; listings of current and near-future Elderhostel and other lifelong learning programs; data on older Virginians, as well as links to other web-based data resources; links to aging-related organizations both within Virginia and elsewhere; a comprehensive overview of the Alzheimer's and Related Diseases Research Award Fund, including past awards since inception in 1982, the current year's awardees, and application procedures; biographical sketches of VCoA staff members and synopses of some of their research interests; and a detailed catalog of VCoA's audiovisual holdings available for loan to individuals, groups, and organizations within Virginia.
- *Age in Action.* VCoA's respected quarterly 20-page publication, co-produced with the Virginia Department for the Aging and Virginia Commonwealth University's Department of Gerontology, reaches some 4,500 professionals, paraprofessionals, elders and families each issue, with educational content, conference, training, and work opportunities, research, and more. Each issue begins with a case study of a condition or topic of broad gerontological relevance. Volume 18's four case studies included "*Aging in Place—Can Universal Design Make It a Reality?*" (Winter 2003), "*Abuse, Neglect, and Exploitation of Vulnerable Elders*" (Spring), "*The Value of Multidisciplinary Care in Parkinson's Disease*" (Summer), and "*Montessori-Based Activities for Dementia: A Walk Down Memory Lane*" (Fall). The Summer 2003 issue also celebrated VCoA's 25th anniversary, with a special 24-page edition that included highlights since

1978 and a retrospective of photographs of staff members and events going back to the early days.

Goals 2004

VCoA will continue its commitment to its legislated mandates, seeking opportunities to leverage its resources to the benefit of older Virginians and their families. We have a rich history of partnerships and affiliations that have helped us to maximize our productivity. We plan to maintain this process.

VCoA will continue its self-appraisal in order to ensure accomplishing the Priority Goals set by its Advisory Committee. VCoA will dedicate two of the quarterly joint meetings of its Advisory Committee and University Council to monitoring progress in attaining annual objectives. The following outline of activities intended for 2004 is organized according to the mandates of interdisciplinary studies, research, and information and resource sharing.

Interdisciplinary Studies

- VCoA intends to leverage its relatively modest human and material resources by collaborating with other organizations in developing meaningful grant proposals for external funding of projects that are consistent with VCoA's mission.
- VCoA intends to develop and host a significant program in spring 2004 on spirituality and the quest for meaning in later life, a much too infrequently visited yet important aspect of aging. The intended program would include varying formats for community older adults, for health care providers, and for professionals and others in human services and communities of faith.
- VCoA intends to maximize its lifelong learning offerings within the current economic constraints. We will assess our Elderhostel program to determine what economies can be gained logistically and will explore creative course development to expand or maintain enrollments. We will continue the partnered growth of the new Lifelong Learning Institute in Chesterfield County in order to engage additional older Virginians as learners and providers of lifelong learning.

- VCoA intends to continue its position in addressing domestic violence against older women. So far, this has involved leadership in a regional task force, a growing number of presentations before professionals in adult protective services, a funded V-STOP project, and several grant proposals to clarify and to address matters affecting abuse and exploitation of older women. We will co-direct a second V-STOP project throughout 2004, supported by federal funds through the Virginia Department of Criminal Justice Services, to increase knowledge of these issues among service providers and law enforcement officers.
- VCoA will complete its joint project with the Department of Gerontology at VCU on overcoming unhealthy lifestyle behaviors. Funded by the State of Delaware, this project seeks to offer older adults whose well-being is negatively affected by substance abuse, gambling, alcohol, or other unhealthy behaviors, a selection of positive health promoting alternatives. In calendar 2004 VCoA intends to complete development of both a statewide survey of older Delawareans to gauge prevalence of unhealthy lifestyles, and a wellness curriculum. VCoA thinks that the processes and outcomes of this project in Delaware will produce benefits for Virginia's older citizens.
- VCoA intends to continue its active collaboration in the continuing multi-year Core Center grant directed by the Virginia Geriatric Education Center. VCoA staff will help to accomplish goals intended to improve the geriatrics training of health professionals and their care of older patients. Key features of this initiative include a Geriatrics Health Professional Mentoring Program, Geriatric Case Management, and a Kids Into Health Careers Partnership.

Research

- VCoA, with two staff members as gubernatorial appointees to the Alzheimer's and Related Disorders Commission, will work to help formulate various ways of leveraging the Commonwealth's diverse expertise in dementia-related issues. The Commission's work on a virtual center is emerging as the most creative and promising answer to this quest.
- VCoA will continue its evaluation of partnered projects to increase both the dementia-specific training of those who work in long-term care and their likelihood of remaining in the field.

- VCoA intends to maintain a robust program of promoting, soliciting proposals for, and disseminating the results of awarded projects in the Alzheimer's and Related Diseases Research Award Fund (ARDRAF). VCoA has documented the extraordinary efficacy of this Fund, and its benefit to both the research community and the community as a whole. VCoA will continue efforts to export ARDRAF as a model for state-based initiatives against dementing illnesses that challenge families and drain resources.

Information and Resource Sharing

- VCoA intends to continue to partner with statewide aging-related organizations in order to disseminate research findings and to expand training for professionals across Virginia. VCoA will co-develop and co-sponsor the annual conferences of associations throughout the year.
- VCoA intends to continue its leadership in two productive alliances for preventing and responding to violence against older Virginians, namely, the Central Virginia Task Force for Older Battered Women and the Virginia Coalition for the Prevention of Elder Abuse.
- VCoA intends to maintain its extensive involvement on the boards and task forces of several non-profit aging-related organizations, offering *pro bono* gerontological expertise and technical assistance to the benefit of the elders and families that these organizations serve.

Virginia Center on Aging Staff in 2003

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Appendix A

Partnerships with Businesses and Agencies in 2003 By Geographic Region

**Virginia Center on Aging
Partnerships with Businesses and Agencies in 2003
By Geographic Region**

Central Virginia

Adult Care Services, Richmond
Agecroft Associates, Richmond
Agecroft Hall, Richmond
Alzheimer's Association-Greater Richmond Chapter
Annabel Lee, Richmond
Appomattox Courthouse, Appomattox
Appomattox Visitor Center
Berkeley Plantation, Charles City
Beth Ahabah Museum and Archives, Richmond
Bettie Weaver Elementary School, Midlothian
Blandford Church, Petersburg
Blandford Cemetery, Petersburg
Bon Secours Memorial School of Nursing
Brandermill Woods Foundation
Bunkie Trinite Trophies, Richmond
Capitol Tours, Richmond
Capitol Snack Bar, Richmond
Capitol Square Preservation Council, Richmond
Central Virginia Coalition for Quality End-of-Life Care, Richmond
Central Virginia Task Force on Older Battered Women, Richmond
Chesterfield County Board of Supervisors
Chesterfield County Parks & Recreation, Chesterfield
Chesterfield County Public Schools
Circle Center Adult Day Services, Richmond
Cold Harbor Battlefield Park, National Park Service
Colonial Printing, Richmond
Comfort Inn Midtown, Richmond
Crater District Area Agency on Aging, Petersburg
Cross-Over Ministry, Inc., Richmond
Dietz Press, Richmond
Eden Pines, Petersburg
Fan Free Clinic, Richmond
Fifty Plus (Richmond Publishing), Richmond
Five Forks National Battlefield Park, Petersburg
Garden Club of Virginia, Richmond
Grant's Headquarters, Hopewell
Hanover Adult Center, Mechanicsville

Hanover County Parks and Recreation, Hanover
Hollywood Cemetery Foundation, Richmond
Hospice of Central Virginia, Richmond
Hunter Holmes McGuire Veterans Administration Medical Center, Richmond
 Division of Geriatrics
 Parkinson's Disease Research Education and Clinical Center
(PADRECC)
Ikon Office Solutions, Richmond
Irvin Gammon Craig Health Center, Richmond
Instructive Visiting Nurse Association, Richmond
James River Bus Lines, Richmond
Jefferson Hotel, Richmond
John Marshall House Museum, Richmond
John Tyler Community College
Kinko's, Richmond
Lewis Ginter Botanical Gardens, Richmond
Living History Associates, Ltd, Richmond.
Mail Boxes, Etc., Richmond
Mailing Services, Richmond
Manchester YMCA, Chesterfield
Masonic Home of Virginia, Richmond
Maymont Foundation, Richmond
Metro Richmond Convention and Visitors Bureau, Richmond
Mt. Pisgah United Methodist Church, Richmond
Museum of the Confederacy, Richmond
Pamplin Park Civil War Site, Petersburg
Petersburg National Battlefield
Petersburg Visitor Center
Radisson Historic Richmond Hotel
Reveille United Methodist Church, Richmond
Richmond Chamber of Commerce
Richmond Magazine
Richmond National Battlefield Park at Tredegar Ironworks
Richmond Redevelopment & Housing Authority
Richmond Riverfront Development Corporation
Sailor's Creek Battlefield, Dinwiddie
Saint John's Church, Richmond
Saint Joseph's Home for the Aged, Richmond
Saint Mary's Catholic Church, Richmond
Saint Paul's Episcopal Church, Richmond
Science Museum of Virginia, Richmond
Scotchtown, Hanover County
Senior Center of Richmond, Richmond
Senior Center of Richmond at Chesterfield, Midlothian

Senior Connections - Capital Area Agency on Aging, Richmond
Shepherd's Center of Richmond, Richmond
Sheraton Park West Hotel, Richmond
Shirley Plantation, Charles City
Siege Museum, Petersburg
South Richmond Adult Day Care
Supply Room Companies, Richmond
Tuckahoe Plantation, Goochland
Tuckahoe YMCA, Richmond
Ukrop's Supermarkets, Richmond
United Way Services, Richmond
Valentine Museum, Richmond's History Center
Vatex, Richmond
Virginia Baptist Mission Board, Richmond
Virginia Civil War Trails, Richmond
Virginia Council on Pharmaceutical Education, Richmond
Virginia Historical Society, Richmond
Virginia House, Richmond
Virginia Museum of Fine Arts, Richmond
Virginia Patriots, Inc.
Virginia Retired Teachers Association-District D, Prince George
Virginia State University, Petersburg
Wachovia
Westover Plantation, Charles City
White House and Museum of the Confederacy, Richmond
Wilton House, Richmond

Eastern Virginia

Alzheimer's Association-Southeastern Virginia Chapter, Hampton
American Rover and Victory Rover, Norfolk
Bacon's Castle, Surry
Casemate Museum, Fort Monroe
Center for Excellence in Aging and Geriatric Health, Williamsburg
Center for Pediatric Research, Norfolk
Christopher Newport University, Newport News
 Department of Nursing
 Lifelong Learning Institute
Chrysler Museum, Norfolk
College of William and Mary, Williamsburg
 Center for Public Policy Research
 Elderhostel
 Research and Graduate Studies, Arts and Sciences

Colonial Home, Chesapeake
Colonial National Historical Park, Yorktown
Colonial Services Board, Williamsburg
Colonial Williamsburg Foundation, Williamsburg
Colonial Williamsburg, Williamsburg
Dominion Village of Poquoson, Poquoson
Eastern State Hospital, Department of Psychology, Williamsburg
Eastern Virginia Medical School, Norfolk
 Department of Anatomy and Neurobiology
 Department of Physiological Sciences
 Glennan Center for Geriatrics and Gerontology
Eddie's Bus Company, Chesapeake
Endview Plantation, Newport News
Fort Boykin Historic Park, Smithfield
Fort Norfolk, Norfolk
Fort Wool, Hampton
Hampton Carousel, Hampton
Hampton Fleet Cruises, Hampton
Hampton-Newport News Community Services Board
Hampton Roads Naval Museum, Norfolk
Hampton University, Department of Pharmaceutical Sciences, School of
Pharmacy
Hampton Veterans Administration Medical Center, Department of Geriatrics and
Extended Care
Hampton Visitors Center
Holiday Inn, Hampton
Holiday Inn Patriot, Williamsburg
Holiday Inn Sunspree, Virginia Beach
Isle of Wight County Museum and Courthouse
Jamestown Island, Jamestown
Jamestown National Park, Jamestown
Jamestown-Yorktown Foundation, Jamestown
Lee Hall Mansion, Newport News
MacArthur Memorial, Norfolk
Mariners' Museum, Newport News
Miss Hampton II Harbor Cruises, Hampton
Mursto Productions, Hampton
Nancy Thomas Folk Art Gallery, Yorktown
NASA Langley Air Force Base, Hampton
Naval Medical Center, Portsmouth
Newport News Park
Norfolk Convention and Visitors Bureau
Norfolk Healthcare Center
Old Dominion University, Norfolk

Department of Psychology
Department of Sociology and Criminal Justice
Lifelong Learning Institute
Peninsula Agency on Aging, Inc., Newport News
Sam's Restaurant, Hampton
Schlotzsky's Deli, Norfolk
Sentara Williamsburg Community Hospital
Smithfield Bakery and Café
Smithfield Center
St John's Church, Hampton
St Luke's Church, Smithfield
Surry House Restaurant, Smithfield
USS Wisconsin, Norfolk
Village of Smithfield, Smithfield
Virginia Air and Space Center, Hampton
Virginia Museum of Marine Science, Gloucester
Virginia Retired Teachers Association-District D, Prince George
Virginia War Museum, Newport News
Virginia Wesleyan College, Health and Human Services Department, Norfolk
Watermen's Museum, Yorktown
Williamsburg Community Hospital
Williamsburg Landing Retirement Community
Yorktown National Battlefield and Cemetery
Yorktown Victory Center

Northern Virginia

Alzheimer's Association - National Capital Area Chapter, Fairfax
Arlington County Department of Human Services and Aging
Burke Healthcare Center
Fredericksburg Chateau, Fredericksburg
Fredericksburg/Spotsylvania National Park Service, Fredericksburg
George Mason University, Fairfax
 Department of Psychology
 Krasnow Institute for Advanced Study
 Lifelong Learning Institute
 School of Computational Sciences
George Washington's Mount Vernon Estate and Gardens
Gerontological Society of America, Washington DC
Goodwin House West, Falls Church
Goodwin House, Alexandria
HeartFields Assisted Living, Fredericksburg
INOVA Health Systems, Falls Church

Loudoun County Area Agency on Aging, Leesburg
Meadowbrook, Reva
Northern Virginia Community College, Annandale
Oak Springs of Warrington, Warrington
Prince William/Manassas Conference & Visitor Bureau, Manassas
Rappahannock Area Agency on Aging, Inc., Fredericksburg
Rappahannock Rapidan Community Services Board, Hartwood
Senior Services of Alexandria
Spotsylvania Visitors Center
Stonewall Jackson Shrine, Fredericksburg
Summerville at Prince William, Woodbridge

Northwest Virginia

Alzheimer's Association – Central and Western Virginia Chapter, Charlottesville
Augusta Medical Center, Fishersville
Blue Ridge Legal Services, Harrisonburg
Cedars, Beverly Healthcare, Waynesboro
Frontier Culture Museum, Staunton
Hall of Valor Civil War Museum, New Market
Harrisonburg-Rockingham Convention and Visitors Bureau, Harrisonburg
Harrisonburg-Rockingham Social Services District, Harrisonburg
James Madison University, Harrisonburg
 Department of Nursing
 Lifelong Learning Institute
Jefferson Area Board for the Aging, Charlottesville
Jefferson Visitor Center, Charlottesville
Lord Fairfax Community College
Michie Tavern, Charlottesville
Monticello, Charlottesville
Monticello Foundation, Charlottesville
Mountain View Nursing Home, Aroda
New Market Battlefield and Museum
New Market Battlefield Military Museum
New Market Battlefield State Historical Park
Nursing Assistant Institute, Charlottesville
Orange County Nursing Home, Orange
P. Buckley Moss Museum, Waynesboro
Shenandoah University, Bernard J. Dunn School of Pharmacy, Winchester
Summit Hill, Waynesboro
Thomas Jefferson Memorial Foundation, Charlottesville
Turner Ashby House, Port Republic
University of Virginia, Charlottesville

University of Virginia Health System, Charlottesville
Department of General Medicine and Geriatrics
Department of Neurological Surgery
Department of Neurology
Department of Pathology
Department of Physical Medicine and Rehabilitation
University of Virginia Senior Services, Charlottesville
Valley Program on Aging Services, Waynesboro
Woodrow Wilson Birthplace, Staunton

Southwest Virginia

Abbott Bus Lines, Roanoke
Appalachian Agency for Senior Citizens, Inc., Cedar Bluff
Blacksburg Electronic Village, Blacksburg
Blue Ridge Parkway Ranger Station and Visitor Center, Stuart's Draft
Carillon Health System, Roanoke
College of Health Services, Roanoke
Days Inn, Lynchburg
Duffield Nursing Facility, Duffield
George C. Marshall Museum, Lexington
George C. Marshall Foundation, Lexington
Hamilton Haven, Roanoke
Holiday Inn Select, Lynchburg
Kendal of Lexington
Lakeview Assisted Living, Roanoke
Lee Chapel and Museum, Lexington
Lexington-Rockbridge County Visitors Center, Lexington
Liberty University, Department of Biology and Chemistry, Lynchburg
LOA-Area Agency on Aging, Inc., Roanoke
Lynchburg College, Belle Boone Center on Aging
Lynchburg Visitor Center, Lynchburg
MacArthur House, Narrows
Mayfair House Assisted Living, Roanoke
Mountain Empire Older Citizens, Inc., Big Stone Gap
Natural Bridge Caverns
Natural Bridge Inn & Conference Center
Natural Bridge Wax Museum
New River Valley Agency on Aging, Pulaski
Peaks of Otter Restaurant
Peaks of Otter Visitor Center
Piedmont Adult Care Residence, Danville
Poplar Forest, Lynchburg

Quality Quick Print, Lexington
Radford University, Radford
 Department of Psychology
 School of Nursing
Rockbridge Historical Society, Lexington
Safe Homes, Craig County
Southern Area Agency on Aging, Martinsville Stonewall Jackson House, Lexington
Stonewall Jackson Memorial Cemetery, Lexington
Virginia Military Institute Museum, Lexington
Virginia Polytechnic Institute and State University, Blacksburg
 Center for Gerontology
 Department of Biochemistry
 Department of Biomedical Sciences and Pathobiology
 Department of Chemistry
 Department of Human Development
 Department of Sociology
Virginia Tech Adult Day Services, Blacksburg
Washington and Lee University, Lexington
Western State Hospital, Neuropsychology Laboratory, Staunton
World War II Memorial, Bedford

Statewide

AARP Virginia
Alzheimer's Disease and Related Disorders Commission
Cerebral Palsy and Aging Focus Group
Consortium on Successful Aging
National Association of Retired Federal Employees
Olmstead Task Force
Prevent Blindness Virginia
Professional/Consumer Advocacy Council
SeniorNavigator.com
United Way, Inc.
Virginia Area Health Education Center
Virginia Arthritis Task Force
Virginia Association for Home Care
Virginia Association of Area Agencies on Aging
Virginia Association of Non-Profit Homes for the Aging
Virginia Association on Aging
Virginia Coalition for the Aging
Virginia Coalition for the Prevention of Elder Abuse
Virginia Department for the Aging
Virginia Department for the Blind and Vision Impaired

Virginia Department of Emergency Management
Virginia Department of Health
Virginia Department of Health Professions
Virginia Department of Medical Assistance Services
Virginia Department of Mental Health, Mental Retardation, and Substance Abuse
Services
Virginia Department of Rehabilitative Services
Virginia Department of Social Services
Virginia Elder Rights Coalition
Virginia Guardianship Association
Virginia Health Care Association
Virginia Quality Healthcare Network
Virginians Against Domestic Violence

Collaboration with Units of Virginia Commonwealth University

Center for Public Policy
Department of Adult Health Nursing
Department of Anatomy and Neurobiology
Department of Art History
Department of Chemistry
Department of General Medicine
Department of Gerontology
Department of Health Administration
Department of Internal Medicine
Department of Occupational Therapy
Department of Management
Department of Pastoral Care, Program in Patient Counseling
Department of Pathology
Department of Philosophy and Religious Studies
Department of Physical Therapy and Rehabilitation
Department of Physiology
Department of Psychiatry
Department of Psychology
Department of Rehabilitation Counseling
Geriatric Medicine Section
Partnership for People with Disabilities
Police Department
School of Allied Health Professions
School of Dentistry
School of Medicine
School of Nursing

School of Pharmacy
Department of Pharmacy
Department of Pharmaceutics
Geriatric Pharmacy Program
School of Social Work
Survey and Evaluation Research Laboratory
Virginia Geriatric Education Center
Virginia Institute for Social Services Training Activities (VISSTA)

Appendix B

Summaries of 2003-2004 Competitive Awards in the Alzheimer's and Related Diseases Research Award Fund And Composition of the Awards Committee

COMMONWEALTH OF VIRGINIA

Alzheimer's and Related Diseases Research Award Fund

**2003-2004 ALZHEIMER'S RESEARCH AWARD FUND RECIPIENTS
ANNOUNCED**

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 (AD) and related disorders along a variety of avenues, such as the causes, epidemiology, diagnosis, and treatment of the disorder; public policy and the financing of care; and the social and psychological impacts of the disease upon the individual, family and community. The ARDRAF competition is administered by the Virginia Center on Aging at Virginia Commonwealth University in Richmond. The four grant recipients of the 2003-2004 awards are as follows:

**UVA James P. Bennett, M.D., Ph.D. and Bradley Miller, M.D.,
Ph.D. (Department of Neurology/Division of Neuropathology)
"Mitochondrial DNA Deletions and Mutations in Alzheimer's Disease
Brain Neurons"**

This research will examine the genetic contribution mitochondria make to Alzheimer's disease (AD). Several aspects of this neurodegenerative disease (i.e., largely sporadic incidence, increasing severity with age, proclivity for neuronal damage) mirror aspects of mitochondrial genetic disease. Until recently, though, it has not been possible to examine directly the mitochondrial DNA content of single neurons. The investigators intend first to use a variety of histochemical techniques to identify pathologically impaired or vulnerable neurons in AD and age-matched control brain regions. Next, they will employ laser-capture microscopy, combined with a PCR (polymerase chain reaction) approach, to examine the mitochondrial DNA present in AD and control neurons. The results of these studies will allow for a much more rigorous, statistically pliable analysis of the coincidence of classical AD and functional mitochondrial pathology. *(Dr. Bennett can be reached at 434/924-8374; Dr. Miller can be reached at 434/924-9175)*

**VA Tech Toni Calasanti, Ph.D. (Department of Sociology) "Gender
Differences in Informal Care Work for Persons with Alzheimer's
Disease"**

A limited pool of research on Alzheimer's Disease (AD) caretakers suggests that men suffer less stress and depression, and fewer physical ailments, than do women. The more qualitative research suggests that women and men experience and express caregiver stress in different ways. This investigation will gather in-depth interview data from a predominately rural sample of spouses

who serve as primary caregivers for non-institutionalized persons with AD. The study will explore how gender influences the experiences of spousal caregiving and will identify styles of care work. The data are expected to provide an important basis for future theory and research on caregiving, and suggest ways that helping institutions might best intervene to relieve stress and ensure optimal care. ***(Dr. Calasanti can be reached at 540/231-8961)***

**VA Tech Shannon E. Jarrott, Ph.D. and P. Diane Relf, Ph.D.
(Department of Human Development/Department of Horticulture)
"Horticulture Therapy for Persons with Dementia: Replication of a Pilot Study"**

Dementia care programs strive to provide appropriate, stimulating programming for their clients. However, the considerable variability of clients' cognitive and physical abilities, along with resource limitations, present serious challenges to care staff. Horticulture therapy, which is the use of plant materials and gardening activities adapted to meet individualized needs and treatment goals, has been associated with increased activity, social interaction, concentration, and positive mood among persons with dementia in adult day services. This study seeks to replicate these findings with a horticulture therapy study that incorporates adult day services and nursing home clients, as well as a comparison group of clients who do not participate in horticulture therapy. ***(Dr. Jarrott can be reached at 540/231-5434; Dr. Relf can be reached at 540/231-9279)***

**ODU Brian K. Payne, Ph.D. and Randy R. Gainey, Ph.D.
(Department of Sociology and Criminal Justice) "The Social Context of Providing Care to Alzheimer's Patients: Specifying Interactions Between Social Disorganization, Service Utilization, Burden, and Mistreatment"**

This study examines caregiving dynamics in Alzheimer's caregiving situations, with specific attention given to the role of the urban neighborhood. Using protective services data, this study examines whether differences exist at the neighborhood level regarding service distribution and utilization, the experience of burden, and the existence of maltreatment. It is expected that disadvantaged neighborhoods will utilize fewer services, experience more burden, and be the source of more mistreatment than more advantaged neighborhoods. The study will also demonstrate whether services provided to families caring for those with Alzheimer's are distributed equally across neighborhoods. *Note: Partial support for this project was provided by a contribution to the ARDRAF from the Alzheimer's Association-Greater Richmond Chapter.* ***(Dr. Payne can be reached at 757/683-3935; Dr. Gainey can be reached at 757/683-4794)***

2003-2004 Awards Committee

Paul Aravich, Ph.D., *Eastern Virginia Medical School*
John W. Bigbee, Ph.D., *Virginia Commonwealth University*
Frank J. Castora, Ph.D., *Eastern Virginia Medical School*
Douglas M. Gross, Ph.D., *Eastern Virginia State Hospital*
Peter Kennelly, Ph.D., *Virginia Tech*
Richard Lindsay, M.D., *University of Virginia*
Bernice Marcopulos, Ph.D., *Western State Hospital*
Linda Phillips, Ph.D., *Virginia Commonwealth University*
Russell H. Swerdlow, M.D., *University of Virginia*
Janet H. Watts, Ph.D., O.T.R., *Virginia Commonwealth University*
Patricia A. Trimmer, Ph.D., *University of Virginia*
Ayn Welleford, Ph.D., *Virginia Commonwealth University*
Emma Wheeler, P.T., M.S., *Virginia Commonwealth University*

APPENDIX C

Summaries of 2002-2003 Awarded Projects in the Alzheimer's and Related Diseases Research Award Fund

Alzheimer's and Related Diseases Research Award Fund

FINAL PROJECT REPORTS FROM 2002-2003 AWARDS

VA Tech Paul R. Carlier, Ph.D. (Department of Chemistry) "Structure-Based Design of Dimeric Memory Enhancing Drugs"

Current FDA-approved therapies for alleviating Alzheimer's memory loss are based on the use of enzyme inhibitors to increase the concentration in brain of the neurotransmitter, acetylcholine. Unfortunately, use of these drugs (acetylcholinesterase inhibitors) is accompanied by side effects, which are largely caused by interaction with unintended biological targets. This study was designed to decrease side effects by improving selectivity for the enzyme of interest, acetylcholinesterase. In the project period the investigator synthesized new acetylcholinesterase inhibitors based on the active constituent of the Chinese medicinal herb, *Huperzia Serrata* (Huperzine A). The drug candidates synthesized in this project represent a second generation of dimeric Huperzine A-derived enzyme inhibitors and atomic scale pictures of how the synthesized drugs attach themselves to acetylcholinesterase informed their design. Each drug candidate contains two fragments of Huperzine A, and can thus interact with acetylcholinesterase at two points, attaining a "tighter grip." This tighter grip will hopefully translate to lower therapeutic doses and lower occurrence of side effects. The second generation of drug candidates differs from the first in the use of a more rigid connector between the Huperzine fragments; the increased rigidity should result in greater inhibitory activity. The investigator is currently awaiting bioassay results to learn if the second generation of drug candidates offers superior potency. **(Dr. Carlier can be reached at 540/231-9219)**

VCU J. James Cotter, Ph.D., E. Ayn Welleford, Ph.D. (Department of Gerontology) and Kathy Vesley-Massey (Chesapeake Bay Agency on Aging, Inc.) "Improving the Capacity of Home Care Aides in Rural Areas Serving Persons with Alzheimer's Disease and Related Disorders"

Training for long-term care workers serving persons with Alzheimer's disease and related disorders (ADRD), especially home care aides, is one of the most important challenges confronting the health care system. The investigators implemented two interventions (Training Only and Training with Support) to enhance rural home care aides' skills in caring for persons with ADRD, and they measured the effect of the interventions on the aides, the informal caregivers (e.g. family), and the patient. They also explored the challenges and opportunities of collaborative research between an academic medical center and a community-based agency for older persons. Aides' knowledge of Alzheimer's

disease increased substantially and was maintained over the course of the study. Despite a more impaired client, the Training and Support intervention was effective in maintaining high degrees of aide and caregiver satisfaction and decreasing the caregivers' perceptions of burden. There were mixed effects for the Training Only group. The investigators identified a number of barriers and facilitators of success in conducting research with persons with ADRD in community-based settings, including the need to focus more resources on recruitment and retention of research participants. The researchers are currently investigating the effect of severity adjustment on outcomes and the potential for expanded community-based research studies to learn more about improving home care aide performance and client satisfaction. **(Dr. Cotter and colleagues may be contacted at 804/828-6071)**

UVA Elana Farace, Ph.D. and Mark E. Shaffrey, M.D. (Department of Neurological Surgery) "Neurocognitive Discrimination of Alzheimer's from Normal Pressure Hydrocephalus Verified by Brain Biopsy"

Many elderly patients with dementia are referred each year to neurosurgeons for evaluation and possible placement of a brain shunt to drain excess cerebral spinal fluid as a means of treating Normal Pressure Hydrocephalus (NPH), a disease characterized by dementia, gait problems, and urinary incontinence. NPH can be successfully treated with the use of a shunt, or tube that drains off the excess fluid. Approximately 10-30% of all patients who present with suspected NPH may have Alzheimer's disease (AD), either as a separate diagnosis or at the same time that they have NPH. This study was intended to determine the effect of AD on whether or not NPH patients benefited from a shunt placement. The research showed that the true rate of AD in patients with presumed NPH undergoing shunt procedures was 40%, much higher than previously thought. These patients with AD tended to improve with shunt placement in terms of walking and urinary continence, but their dementia remained the same or worsened. Neuropsychological testing was diagnostically suggestive of NPH, and may contribute to a non-invasive method for determining possible NPH and AD. This research will lead to improved outcomes in patients appropriate for shunt placement in NPH, and help patients with AD avoid unnecessary neurosurgery. **(Drs. Farace and Shaffrey may be contacted at 434/2434806)**

JMU Merle E. Mast, Ph.D. and Marylin Wakefield, Ph.D. (Department of Nursing) "Rural Family Caregivers' Perceptions of Facilitators and Deterrents to the Use of In-Home Respite"

Although caregivers of persons with AD cite respite as a pressing need, many caregivers do not use respite services or delay using them until very late in the disease process. To date, research has noted, but has not gained, an understanding of this phenomenon. Little is known about the extent to which specific interventions correspond to caregivers' perceptions of what they need

and would find useful. This qualitative study used Grounded Theory to explore rural family caregivers' perspectives of the factors that either enhance or deter the use of in-home respite. Emergent themes include family relationships, loss/grieving, trust, caregiver self-knowledge, caregiver purpose/role/sense of obligation, family/cultural taboos, decision-making process, seeking/asking for help, barriers to asking for help, and defining moments. Caregiver distress is a major over-arching theme, clustering in four distinct and interrelated areas: "normal" aging stressors, family issues, unresolved grief, and inadequate assistance. There seems to be an inverse correlation between the level of caregiver distress and the willingness to seek out, and accept, in-home respite services. Forthcoming results will provide definitions of caregiver distress and a working model of the interrelatedness of caregiver distress to decision-making about in-home respite care. **(Drs. Mast and Wakefield may be contacted at 540/568-6314)**

Mountain Empire Older Citizens, Inc. Marilyn Pace Maxwell, M.S.W. and Michael Creedon, D.S.W. "Using the Internet for Alzheimer's Care: The Challenge for Elders and Service Organizations in Approach"

The development of wired communities, broadly connected by computer technology, allows local organizations to interact with and support specific families and individuals in previously unexplored ways. Taking advantage of this progress in rural Southwest Virginia, the investigators examined the feasibility of computer-assisted support for family caregivers of persons with Alzheimer's disease. A telephone survey of caregivers found that 50% of respondents had access and were willing to use computers as a learning tool and to support their caregiving roles, though few currently used computer technology as an information source. Few of those without access expressed any desire to use, or learn to use, computers. Three of the eleven participants in a focus group on electronic technology and caregiving were using computers for caregiving purposes (two for an Alzheimer's chat room, one to access the Alzheimer's Association web site). Most were willing to learn to use computers for caregiving, and all regarded teenage trainers as a positive resource. These findings serve as the basis for program development and technology support services, with the ultimate goal of assuring that the needs of Alzheimer's caregivers are included in the region's plans for developing the wired community. **(Ms. Maxwell and Dr. Creedon may be contacted at 276/523-4202)**