Aging Successfully, Vol. IX, No. 3

A newsletter of the Division of Geriatric Medicine, Department of Internal Medicine, Saint Louis University School of Medicine; Geriatric Research, Education and Clinical Center, St. Louis Veterans Administration Medical Center; and the Missouri Gateway Geriatric Education Center

Aging Thoroughly the Eye of the Artist

By John E. Morley, M.B., B.Ch.

Aging is associated with multiple changes within the eye as delineated in the table on page 3. These anatomical changes are in turn responsible for the development of a variety of functional changes. Among the most important of these are loss of contrast sensitivity, a decrease in peripheral sensitivity, and a decline in the ability to track objects. The combination of these factors plays a role in the decline in function and quality of life and the increase in falls and motor vehicle accidents. (continued on page 2)

Grandma Moses at 101
(Anna Mary Robertson: 1860-1961)

As we approach the year 2000, it is perhaps useful to examine the future of an aging world in the next millennium. It is clear that by the year 2030, the percentage of the population over 65 years of age will be greater than 20% in most of the developed nations. In addition, enormous increases in real numbers of older persons will occur in the developing nations such as China, those of the Asian subcontinent and Mexico. With the expected continued decrease in birth rate, this will lead to a marked increase in the dependency ratio, i.e. the number of persons over 65 years compared to those of working age. There will (continued on page 10)
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(d tented seen in many older persons. To detect the changes in vision with aging, visual testing requires more sophisticated techniques than just utilizing the Snellen vision chart. The Useful Field of Vision is emerging as an excellent tool for determining the functional vision of an older person. In addition to the physiological changes of aging (see the figure on page 22), the aging eye is susceptible to the ravages of a variety of pathological conditions such as cataracts, macular degeneration, glaucoma, and diabetic retinopathy, that may further impair vision in later life.

The effects of some of these diseases of the eye in old age have been inadvertently chronicled by the paintings of a number of famous artists. Cataracts appear to have been a particular affliction of the early impressionists. Monet’s serial paintings of the “Bridge at Giverny” clearly demonstrate the effects of cataracts on painting with the bridge slowly disappearing over time. Renoir and Mary Cassatt were also afflicted with cataracts. This plethora of cataracts among artists of this time period (late 19th to early 20th century) has led to the concept that impressionism is the world seen through cataracts!
Among the pre-impressionists, the Turner paintings represent the most striking example of the effect of cataracts (see page 22). Post-impressionist, the paintings of the expressionist, Roualt, such as the “Old King,” are examples of cataracts clouding art.

While the majority of the population are not myopes, the majority of artists are myopic. It has been argued that myopia allows better delineation of detail in portraits. Further, myopia is a common precursor to the early development of cataracts. The classical visual change of aging is presbyopia. The effects of presbyopia are often seen in aging artists as a loss of fine detail in their portrait painting. This loss of detail is particularly well seen in the evolution of Rembrandt’s self-portraits with aging over the course of decades. Alternatively, some artist’s paintings improved with age as seen with the last painting done by Grandma Moses at age 101 years (see page 1).

The Starry Night (Van Gogh). This is a typical example of digoxin toxicity with haloes.

Dr. Gauchet (Van Gogh). Note the foxglove (digitalis) which was used to treat Van Gogh’s epilepsy.

Edvard Munch developed a vitreous opacity (“floater”) in his eye at the end of his life that had the shape of a bird. This “bird” appeared repeatedly as a centerpiece of his late drawings.

Obviously, artists are rarely colorblind. An exception was Constable whose blue-green colorblindness accounted for his particular coloring of his landscapes which are primarily yellow and brown. Cezanne

(continued on page 22)
Fifth Annual MIMA Conference Declared a Success

Over 200 participants recently attended the Fifth Annual Missouri Institute on Minority Aging (MIMA). The annual institute is a program of Lincoln University Cooperative Extension System’s Missouri Center on Minority Health Aging. The Institute is sponsored by over 16 state, public, and private organizations including Saint Louis University’s Missouri Gateway Geriatric Education Center. The conference was held September 1-3, 1999 at the Capitol Plaza Hotel in Jefferson City. Attendees representing over 35 agencies and organizations from across the state rated this year’s institute “the best yet!” High in attendance were representatives from the Division of Aging, the Area Agencies on Aging, and the Department of Health.

The Annual Institute is the only provider-trainer opportunity in Missouri dedicated to improving the quality of life of minority elders. The three-day Institute provides a full day of diversity training and educational workshops on current minority health and aging related topics. The best-attended workshops this year discussed self-management of diabetes, spirituality and aging, sexuality and aging, HIV among older adults, and grandparenting issues. Senator Mary Bland (D-9) facilitated the grandparenting workshop that examined the increased physical, emotional, and economic vulnerability experienced by minority grandparents who have taken on the parenting responsibilities of their grandchildren.

The Annual Awards Luncheon recognized leadership and innovation helping to improve the quality of life for minority older individuals in Missouri. At the annual luncheon, Andrea Routh, Director of the Division of Aging, presented the Troy D. Cole Leadership Award for Outstanding Contributions in Minority Aging. Lieutenant Governor Roger B. Wilson, also in attendance, presented Teach.com, a partner of Southwestern Bell, with the Lincoln University Technology Advocacy Award. Lincoln University’s own Dolores Davis-Penn, Ph.D. was also recognized for her lifetime of accomplishments and contributions to the field of gerontology and minority aging in Missouri. Lieutenant Governor Roger Wilson, along with representatives from the Missouri Departments of Health, Mental Health, and Social Services, honored the former State Gerontology Specialist and Coordinator of the MCMHA with gifts and thoughtful praise. Her tireless efforts in creating the Missouri Institute on (continued on page 21)
Jeanne Calment: From Van Gogh’s Time to Ours

By Michel Allard, Victor Lebre, and Jean Marie Robine, WH Freeman: New York, 1994

This wonderful little book chronicles the memories of the world’s longest lived person as seen through the eyes of her physician and two gerontologists. Madame Jeanne Louise Calment was born before the telephone was invented and died in August 1997. Aged 122 years and 164 days, she credited her longevity to Port wine and a diet rich in olive oil. She gave up cigarettes two years before her death. She took up fencing at age 85, was still riding her bike at 100, and released a CD, “Time’s Mistress” on her 121st birthday. A little girl born today who lives as long as Madame Calment will still be alive in the year 2122. Late in life, she described herself as “I’m God’s little angel.” She attributed her long life to: “always keep a smile. I attribute my long life to that. I believe I will die laughing. That’s part of my program.”

When she was asked how she felt about being famous, she replied, “I waited 110 years to become famous. I intend to make the most of it for as long as possible.” And her incomparable wit was shown when on another occasion, she said, “I wait for death…and for journalists.” When a journalist asked her a question beginning “In your time…” she quickly replied, “Rut now is my time!”

A religious person, she once remarked, “The good Lord must have forgotten me. He can’t be in a hurry to see me.” When asked by her doctor if she believed in medicine, she said, “Yes, but I don’t believe in yours much! It’s to reassure you.” And on being asked if she feared dying, she replied at age 118, “No. Now, I wish for it, as life holds no interest for me.”

When a surgeon told her she would be immobile for a while after surgery at 115 years of age, she said, “I’ll wait. I have all the time in the world.” When asked about Picasso, she snapped, “Yes, that’s fairly recent isn’t it.” And when a reporter said to her, “Maybe I’ll see you next year?” she retorted, “Why not? You don’t seem to be in such bad health.”

This wonderful book celebrates the sayings of the world’s oldest person who lived her whole life in Arles, France. This is a book that all gerontologists should read.
Established in 1991, the School of Public Health at Saint Louis University is the newest school in the Health Sciences Center. It currently has 30 full-time faculty and over 200 graduate students pursuing training in epidemiology, biostatistics, health education, health administration, environmental science, and health services research. In a very short time, the School of Public Health has developed an active and nationally recognized research program that generates more than $5 million annually in external funding. A growing segment of that research portfolio focuses on the health and health behavior of older adults. This article provides a brief overview of just some of those activities.

One of the more visible indicators of the growing presence of aging studies in the School of Public Health has been the arrival of the Journal's editor, and the editorial offices were relocated to the School of Public Health. The Journal is one of five of the official journals published by the Gerontological Society of America, appears bi-monthly, and has a paid circulation of over 6,500 copies. It has consistently been the premiere outlet for social science research on aging. Moreover, of the 41 top journals in gerontology and geriatrics, the Journal ranks third in its impact on the field, according to the most recent report of the Institute for Scientific Information. Having the Journal located here provides a cornerstone for building a strong foundation in aging studies.

In addition to editing the Journal, Dr. Wolinsky has an active research program that has recently been focused on two sets of issues. The first involves the rates of occurrence, costs, and outcomes associated with conditions that usually require hospitalization for older adults. These studies are based on the analysis of the data obtained from the federally funded Longitudinal Study on Aging, which involved baseline interviews with a nationally representative sample of over seven thousand older adults in 1984, who were then re-interviewed in 1986, 1988, and 1990. The data elicited in these interviews were then linked to Medicare claims files for these seniors for calendar years 1984-1991. Using these data, Dr. Wolinsky’s recent studies have focused on pneumonia, hip fractures, congestive heart failure, acute myocardial infarctions (heart attacks), and strokes. On-going studies are investigating breast and other can-

Pictured left to right: School of Public Health researchers Kathleen W. Wyrwich, Ph.D., Elena M. Andresen, Ph.D., and Fredric D. Wolinsky, Ph.D.
The School of Public Health is also the home of a highly innovative research center that focuses on studies involving the delivery of personalized health behavior messages. Dr. Matthew W. Kreuter, Associate Professor of Community Health, is the Director of this center, the Health Communication Research Laboratory. Two of its most recent projects have specifically targeted older adults. The first project, the Partners In Women's Health Study, was just completed. It involved a computer tailored program to facilitate medication compliance among pre-, peri-, and post-menopausal women at increased risk for heart disease and osteoporosis. Behavioral Risk Factor Surveillance System, the Quality of Well-Being Scale, the Medical Outcomes Study SF-36, and the Instrumental Activities of Daily Living. Each instrument was found to pose only a low level of respondent burden, yet was able to discriminate between residents of nursing homes and assisted living centers. Only the Quality of Well-Being Scale, however, produced normally distributed data. Convergent validity among these four instruments was quite good with strong correlations among many of the comparable scales.

The second set of issues that Drs. Wolinsky and Wyrwich are researching involves the development and refinement of statistical tools for use in identifying clinically relevant changes in measures of health-related quality of life among older adults. Once developed, these tools can be used to monitor the health of the elders themselves, and the ability of the health care delivery systems that they are using to maintain and enhance their well-being. Such tools are critically important in today's environment for regulating managed Medicare. So far, these studies have enrolled about six hundred outpatients in each of three targeted disease groups: congestive heart failure and coronary artery disease, chronic obstructive pulmonary disease, and asthma. At their enrollment visit and every six months thereafter, each outpatient is administered a questionnaire that focuses on the symptoms and functional limitations specific to their particular disease, as well as the more generic Medical Outcomes Study SF-36 that can be compared across patients having different diseases. The analyses focus on how much change over time represents meaningful change, from both the physician and patient perspectives. In a quite related project, Dr. Elena M. Andresen, Associate Professor of Community Health, and her research team are conducting a comparative evaluation of several different health-related quality of life measures in nursing homes and assisted living centers. This, too, is very important research, because generic measures of functional status and health-related quality of life have not been well tested in these settings. In this study, about 200 nursing home and alternative living center residents with intact cognitive abilities were interviewed in metropolitan St. Louis. Four standard survey instruments were administered to each resident: the

Questions? FAX: (314) 909-0443

(continued on page 16)
Dr. Douglas K. Miller Receives Grant
Examines Effects of Aging in African Americans

Douglas K. Miller, MD has been awarded the largest grant ever awarded by the National Institutes of Aging (NIA) on its own. The $5.613 million grant will be used to investigate the potential causes and previous measures of physical frailty in urban African Americans.

Eight years ago, in an NIA-funded 5-year grant, Dr. Miller determined that elderly African Americans, aged 70-99 years, living in urban St. Louis showed a greater risk for disability than either age-matched Caucasian St. Louisans or African Americans living elsewhere in the United States. In order to determine the cause of this increased risk of frailty, Dr. Miller will now look at a younger contingent of urban African Americans, aged 50-64, and follow them for four years. He will study how obesity, weight loss, fear of falling, and lack of walking affect peoples’ ability to care for themselves and determine how extensive a role socioeconomic status plays in general health.

This work will involve four investigators at Saint Louis University and consultants at Washington University in St. Louis and the University of Colorado. Additional work on this grant will be performed by the University of Michigan and Battelle SRA of St. Louis.

Rush and Saint Louis University Collaborate on Geriatric Education

Dr. Martin Gorbien, Director of Geriatrics at Rush University and the MOGGECE have been exploring a number of joint geriatric education opportunities and have agreed in principle to work closely together over the next few years to enhance quality of gerontology education in the Chicago area. Dr. Gorbien will also bring his expertise on elder abuse to educate health professionals in Missouri and Southern Illinois.

Together with Dr. Morley and Donald A. Jurivich, D.O. (University of Illinois), Dr. Gorbien organized the first “Aging Successfully” dinner at the Central Society Meeting in September. Dr. David Thomas gave the after dinner talk on “A Nutrition Algorithm to Enhance Nursing Home Care.” The dinner was sponsored by Bristol-Myers Squibb, and plans are underway to continue the dinner next year at the Central Society Meeting. Geriatricians in the Midwest are encouraged to attend the Central Society meeting which is becoming a leading venue for young geriatricians to network and be exposed to the cutting edge of geriatric science.
the EYES have it

ACROSS
3. Country where glasses were invented
6. Brain tumor near chiasm
8. Clouding of crystalline lens
11. Area comprised only of cones
12. Cells that see in the dark
14. Crossed eyes
16. Front of eye
17. First line drug for glaucoma
18. Intraocular pressure measurement
21. Droopy eyelid
22. Middle layer of eye
23. Non-surgical eye doctor
24. Inventor of bifocals
26. “Old vision”
27. Person who sells glasses

DOWN
1. Farsightedness
2. Leading cause of blindness
4. Thin membrane over sclera
5. Eye surgeon
7. Focusing mechanism of eye
9. Tearing
10. Glasses worn by geriatric patients
13. Syndrome of extreme dryness
15. Outer layer of eye
19. Result of digitalis overdose
20. Corneal distortion
25. Nearsightedness

Puzzle answer is on page 15
also be marked increases in the old-old (over 80 years of age) with a concomitant increase in the number of frail elderly. These changes should be celebrated as one of the great medical-social successes of the twentieth century. Unfortunately, too often these demographic changes are seen as an “aged crisis” rather than a cause for celebration.

Advances in medical science are resulting in cures of many diseases. However, for most older persons, the gigantic geriatric successes are in the simple interventions. There is clear evidence supporting the interdisciplinary team approach to care as has been demonstrated in Acute Care for the Elderly (ACE) and Geriatric Evaluation and Management (GEM) Units. Rational approaches to medication reduction also appear to improve outcomes. Exercise programs, with an emphasis on balance, appear to decrease falls as do multi-interventional programs stressing the basic geriatric principles. Appropriate recognition and treatment of depression produces remarkable enhancement of quality of life in older persons. However, these simple approaches are often not instituted in favor of more “high tech” approaches that are more costly and of more dubious efficaciousness. It is hoped that in the next century, administrators will recognize the cost effectiveness of “high touch” techniques.

Continuous Quality Improvement (CQI) coupled with appropriate employee empowerment represents an incredibly powerful tool to improve the care of older persons. At Saint Louis University, we have pioneered this approach for the care of older persons. The general adoption of CQI is key to the success of care for the elderly.

With the complete characterization of the genome early in the next century, we will see a variety of genetic cures for disease. In particular, cancer should become a much more treatable condition. Our work on the SAMP8 mouse and the beta-amyloid transgenic mice suggest that antisense modulation of the amyloid precursor protein may lead to dramatic improvements in cognition in Alzheimer disease.

Understanding of the causes of sarcopenia (“flesh-wasting”) should lead to innovative strategies to decrease physiological age-related frailty. In particular, this may involve hormones such as testosterone, cytokine antagonists, appropriate nutrition, and physical exercise.

Perhaps the most exciting and futuristic changes in the next millennium will involve the interface of computers and medicine. Certainly, the technology and skills are available to program computers to become better diagnosticians than physicians and also utilizing evidence-based medicine to play a role in the choice of appropriate therapeutic approaches. Even more exciting are the emerging technologies of retinal chip implantation to enhance vision, cochlear chips for hearing, and electrostimulation of the basal ganglia to treat Parkinson’s disease. At the turn of the century, we stand on the threshold of computer neuronal interfaces which represent one of the most exciting, yet ethically troublesome, technologies that no longer can be considered science fiction. For the true futurist, the possibility that the 80 year old in the 22nd century may consist of cloned and/or bionic parts and a brain which has been downloaded onto a computer is no longer an impossibility.

Coming back to the present however, it needs to be recognized that older persons are often mistreated. Elder abuse is regularly being done to 1 in 20 older persons. Iatrogenesis makes hospitals dangerous places for the elderly. Older persons are often restrained despite extensive literature demonstrating that restraints cause an increase in injuries. Nursing homes are being administratively strangled by regulatory agencies and lawyers. In the modern era, what is documented in the chart has become more important than the administration of care. The Talmud tells us that those who stand by and watch abuse occur without stopping it are more guilty than those who commit the abuse. Those of us who really care about our older friends need to speak out against the multiple abuses that our society is creating for the elderly by allowing rampant administrative and legislative stupidity coupled with a legal system whose goal is financial reimbursement and which is fueled by arrogant academicians and glory-seeking politicians. These are harsh words that certainly do not apply to all, but clearly come close to the truth in many instances. The future of each of us as we age is dependent on the ability to develop a truly evidence-based system of elder care that invests money in care rather than in obtaining punitive damages for a few glaring examples of inappropriate care.

Thus the new millennium which logically starts in the year 2001, but which will be celebrated by the world a year early, represents a time of tremendous potential for improved outcomes for older persons. Whether or not this promise is realized will depend on each of us and our students. Let us not fail the elderly of the future, for they are us.
Dr. Joseph Flaherty Receives Award

The Department of Health and Human Services (Division of Health Resources and Services Administration) has awarded approximately 15 Geriatric Academic Career Awards to physicians around the US at accredited schools of allopathic and osteopathic medicine. The purpose of the grant is to increase the number of junior faculty who can provide teaching services and develop research in geriatric medicine. One of the recipients, Joseph Flaherty, MD, in the division of geriatrics at St. Louis University and St. Louis VA GRECC, will receive salary support of $50,000 each year for the next 5 years. In addition to his current responsibilities of patient care and teaching home care and hospice to third year medical students and teaching geriatrics to those who care for older persons in the hospital (on the ACE Unit), his goals over the next 5 years include: develop geriatrics education in the second year medical school curriculum; pursue further research on the ACE Unit and in TQM and healthcare; and expand the membership of the Missouri chapter of the American Geriatrics Society.

It’s GEROPADY!

GEROPADY, the game that tests your knowledge in geriatrics and gerontology, is again available! The game uses the format of the popular television game show, Jeopardy. The GEROPADY kit includes loose-leaf notebook, instructions, questions and answers, five game board transparent overheads, a “Final GEROPADY” overhead, and materials.

To receive your GEROPADY kit, send a check for $25 and your address to:

Saint Louis University Health Sciences Center (SLU-HSC)
Division of Geriatric Medicine
1402 S. Grand Boulevard, Room M238
St. Louis, Missouri 63104

Make checks payable to: SLU-HSC – Geriatrics

GEROPADY is produced by the Missouri Gateway Geriatric Education Center, the Division of Geriatric Medicine at Saint Louis University, and the Geriatric Research, Education, and Clinical Center (GRECC), St. Louis Veterans Affairs Medical Center.

Questions? Call Carolyn Phelps at (314) 909-1894.
Coming Programs and Opportunities

Special Program for Retirees
The University of the Third Age
March 11, 2000
This one-day conference is held in St. Louis at the Margaret McCormick Doisy Learning Resources Center on the Saint Louis University Medical Campus. U3A meetings enable healthy elders to explore successful aging in an academic environment. Sponsored by the Saint Louis University Health Sciences Center in cooperation with the GRECC at the VA Medical Center. The theme for the March 11th conference will be Springing Forward into a Third Age. Contact (314) 577-8462 for more information.

Special Programs for Health Providers
Nineteenth Annual GRECC Conference
April 29-30, 2000
This conference will present research, education, and clinical advances in the field of complementary and alternative medicine. The conference will be held at Logan College of Chiropractic in Chesterfield, Missouri. For more information, please contact (314) 894-6510.

2000 Primary Care Symposium
February 26, 2000
This one-day symposium will be held February 26, 2000 at the Drury Lodge in Cape Girardeau, Missouri. The event is co-sponsored by the Cape Girardeau County Area Medical Society and the Missouri Gateway Geriatric Education Center. To make your hotel reservation, call the Drury Lodge at (573) 334-7151 and mention the Cape Medical Society to obtain the conference rate of $69 per night. For more information, call (573) 334-5691.

The Eleventh Annual Saint Louis University Summer Geriatric Institute
June 14-16, 2000
This three-day interdisciplinary conference will be held in St. Louis at the Margaret McCormick Doisy Learning Resources Center on the Saint Louis University Medical Campus. The conference theme will be “Steps to Success in Teamwork.” The conference is sponsored by the Saint Louis University Health Sciences Center in cooperation with the Missouri Gateway Geriatric Education Center, the VA Medical Center, and the Center for Interdisciplinary Geriatric Assessment. For more information, contact (314) 909-1894 or FAX (314) 909-0443.

Clinical Lecture Series
Beginning each September and running through May, this annual series covers a variety of clinical areas and are directed to an interdisciplinary audience. Lectures are held on Wednesdays between 3 and 4 p.m., alternating locations between Auditorium C of the Learning Resource Center at Saint Louis University and Room 3S1 in Building 50 at the St. Louis Veterans Affairs Medical Center (VAMC) at Jefferson Barracks. To be placed on the mailing list, please call (314) 894-6510 or fax (314) 894-6614. Sponsored by the GRECC - St. Louis, the Division of Geriatric Medicine, and the Missouri Gateway Geriatric Education Center (MOGGEC).

Research Lecture Series
A companion series to the clinical lecture series listed above, these talks cover a variety of research topics including basic research, clinical and social issues, and are directed at an interdisciplinary audience. Lectures are held on Wednesdays between 4 and 5 p.m., immediately following the clinical lectures.
Eighteenth Annual GRECC Symposium is a Real Eye Opener

By Nina Tumosa, Ph.D.

Seventy-three optometrists and vision care specialists met in St. Louis in September for two days of intense networking on the aging eye. The 18th Annual GRECC (Geriatric Research, Education, and Clinical Center at the VA Medical Center) Symposium took place on the University of Missouri-St. Louis (UMSL) campus. Participants from California, Arkansas, Maryland, North Carolina, Illinois, Kansas, Georgia, Tennessee, and Missouri met to discuss the management and rehabilitation of the aging eye. John Morley, M.B., B.Ch., from the St. Louis VA, began the conference with a spirited discussion on why so many famous artists were myopic and how cataracts were responsible for the rise of the Impressionist movement. Joseph Maino, O.D., from the Kansas City VA, went on to discuss the impressive history and mission of their VICTORS (Visual Impairment Centers To Optimize Remaining Sight) program, the premier low vision rehabilitative clinic in the country. Veterans are given 20 hours of training in the use of low vision devices (LVDs) which are prescribed and dispensed through the VA. The most highly successful LVDs used for reading are video magnifiers. Spectacle magnifiers are used but with less success. Two years after prescription/dispensing, a remarkable 85% of veterans were still using their LVDs. UMSL School of Optometry faculty completed the program on day one. Carl Bassi, Ph.D. and Vengu Lakshminarayanan, Ph.D. discussed visual losses that occur in Alzheimer’s patients and visual functions that do not change with age, respectively. Steven Grondalski, O.D. used eleven case studies to discuss interview techniques and to hone the group’s clinical skills in formulating a diagnosis and selecting a viable treatment plan for a myriad of geriatric vision complaints. Jane Shea, R.N., O.D. presented a comprehensive pharmacology update, discussing not only new ocular drugs with their systemic side effects (see table below), but also talking in depth (continued on page 21).

Ocular Side Effects of Common Systemic Drugs

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<thead>
<tr>
<th>Drug Type</th>
<th>Side Effect</th>
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<tbody>
<tr>
<td>Beta blockers</td>
<td>Vivid visual hallucinations</td>
</tr>
<tr>
<td>Digitalis glycosides</td>
<td>Color vision disturbances in yellow-blue axis</td>
</tr>
<tr>
<td>Anti-inflammatory agents</td>
<td>Cataracts, increased ocular pressure</td>
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<tr>
<td>Anti-rheumatic agents</td>
<td>Visual field and color vision disturbances and pigmentary maculopathy</td>
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<tr>
<td>Anti-anxiety agents</td>
<td>Decreased vision, corneal reflex, and accommodation</td>
</tr>
<tr>
<td>Serotonin reuptake inhibitors</td>
<td>Blurred vision, decreased accommodation</td>
</tr>
<tr>
<td>Phenothiazine anti-psychotics</td>
<td>Decreased accommodation, nuclear stellate cataracts</td>
</tr>
<tr>
<td>Anti-psychotic agents</td>
<td>Blurred vision</td>
</tr>
<tr>
<td>Anti-parkinsonian agents</td>
<td>Decreased accommodation</td>
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</tbody>
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Living Longer...Living Stronger

This column seeks to answer questions, provide information, and to challenge each of you to live longer and stronger. In each issue, Dr. John E. Morley pens some of his suggestions.

Q I’m an active older adult. For a walking trip into the woods, what can I do to avoid Lyme disease from ticks?

A The Center for Disease Control has a number of recommendations for personal protection from tick bites. Most importantly, avoid tick-infested areas from April through July. Check with local park services for areas where ticks are most prominent. Cover as much flesh as possible by tucking shirt and socks into your pants and wearing a long sleeved shirt and a hat. Put tape over the area where pants and socks meet. Spray DEET (an insect repellant) on exposed flesh and clothes or treat clothes with permethsin. Walk in the center of trails and avoid overhanging grass and brush. Wear light colored clothes to allow ticks to be easily seen. After the walk, check your body for ticks. Remove attached ticks with tweezers without crushing their bodies. Wash clothing and dry at high temperature.

A vaccine for Lyme disease, LYMErix™ (SmithKline Beecham) is available. Three shots are required and, at present, immunity lasts for two years. The vaccine prevents about 4 out of 5 cases of Lyme disease, but is not recommended for persons with chronic arthritis.

Q I have a relative who has been diagnosed with “GERD.” How does this condition develop? What is the best treatment for this condition?

A GastroEsophageal Reflux Disease (GERD) is extremely common. It occurs more frequently as we get older. It’s symptoms include heartburn (“the fire inside”), regurgitation of acid into the mouth, and less commonly, angina-like chest pain, cough, hoarseness, laryngitis, and asthma. It has many causes but is generally due to reflux of stomach acid into the esophagus. This may be due to weakening of the valve at the end of the esophagus. This acid damages the esophagus or can reflux further into the mouth and pass down the windpipe to produce a cough or asthma. Persons with a hiatal hernia, a condition in which the stomach passes through a hole in the diaphragm into the chest, are particularly prone to develop GERD.

The treatment of GERD involves lifestyle modifications, medications, and possibly surgery. Lifestyle modifications including raising the head of the bed (you can do this yourself or buy plastic “Bed Blok” or “Bed Up, a plastic bladder that raises the mattress); decreasing fat and avoiding citrus fruit, tomato products, coffee, garlic, onions, peppermints, and chocolate; avoid eating for at least 2 hours before going to bed; stop smoking; check with your doctor if any of your medications may be relaxing the esophageal valve or irritating the esophagus. Mild esophageal symptoms can be quickly blocked by neutralizing the acid with an antacid such as Tums™, Maalox™, or Rolaids™. These agents work for only an hour or so. Gaviscon™ is a longer-acting agent that coats the stomach. A number of H2 blockers (Pepcid™ AC, Zantac™75, Tagamet™ HB, and Axid™AR) are available over-the-counter but the dosages may be insufficient to totally prevent acid reflux, thus allowing long term esophageal damage to occur. Proton pump inhibitors (omeprazole or lansoprazole) are the most potent acid inhibitors. They should be taken before breakfast and dinner. If you cannot swallow capsules, you can sprinkle the granules from the capsules on apple sauce or yogurt. A drug that empties the stomach, cisapride, is often administered together with a proton pump inhibitor.

A surgical operation called fundoplication produces a cure of GERD in 90% of cases. In this operation, a portion of the top part of the stomach is wrapped around the esophagus, thus compressing the esophagus and stopping reflux.
the EYES have it  (From puzzle on page 9)

MOVING?
Please let us know if this issue is misaddressed or if you will be moving soon. Please fax the label from the back of this issue along with the new address. Please allow 8-12 weeks for the change to be effective.

Geriatrics Information Available to Physicians and Other Health Professionals

If you have a question about health care for older adults, call 1-800-MDS-LINE (1-800-637-5463). Questions about patient care, nutrition and aging, medications, geriatric assessment, falls, depression, delirium and dementia, incontinence, and sexual dysfunction will be directed to the faculty of the Missouri Gateway Geriatric Education Center by Saint Louis University Health Sciences Center, which administers the service. You will be called back promptly with help.

Hours are Monday through Thursday, 8:00 a.m. to 5:00 p.m., and Friday, 8:00 a.m. to 4:00 p.m.

Questions? FAX: (314) 909-0443

Donations and Bequests

The Geriatric Medicine Education and Research Fund at Saint Louis University School of Medicine welcomes contributions to further geriatric research, education and training. If you wish to make a donation in honor of an individual, indicate this in your correspondence. An appropriate acknowledgment will be sent to the honoree or family in your name. Contributions are deductible for income tax purposes to the extent allowed by law.

Donations and bequests can be directed to:

Geriatric Education and Research Fund
Division of Geriatric Medicine
Saint Louis University
School of Medicine
1402 S. Grand Boulevard, Room M238
St. Louis, Missouri  63104

Please direct inquiries to Carolyn Phelps at (314) 909-1894.

Thank You!

We extend a very sincere thank you to the following donors who have seen the vision and contributed to support the research efforts currently underway in the Division of Geriatric Medicine at Saint Louis University. Your gifts do make a difference, and we thank you.

J. John Brouk
Joe Desloge
Max K. Horwitt, Ph.D.
Thomas Martin
Ann G. Morrissey
Mrs. J. Gerald Mudd
Anna P. Perkins
James A. Winkelmann
Merck & Company
in other health promoting activities like exercise and consumption of a diet high in calcium. The second phase of the program was developed for Innovative Health Solutions, also of New Jersey. It focused on post-menopausal women (over 60 years old) who were taking osteoporosis prevention medication, cholesterol-lowering medication, beta-blockers, or diuretics. The emphasis here was less on taking hormone replacement therapy for menopause, and more on preventing osteoporosis and cardiovascular diseases. Again, the women were encouraged to take their medication as prescribed as well as to engage in physical activity and eat a diet low in fat and high in fiber. Both phases of this project were highly successful.

The second aging studies project housed in Dr. Kreuter’s Health Communication Research Laboratory is the Cultural Tailoring Study. Its purpose is to develop an enhanced tailored communication system to promote two types of cancer control behaviors — early detection and lifestyle change — among 1,500 low-income African American women from ten public health centers in St. Louis. There is substantial unmet need for effective cancer control programs in this underserved population, and preliminary evidence suggests tailored communication strategies may be especially effective among African Americans. However, tailored interventions tested to date have been based solely upon constructs drawn from a handful of health behavior theories (e.g., readiness to change, perceived barriers). While these variables are important to behavioral interventions, they represent but one set of factors that influence a person’s motivation and ability to make changes, and don’t always apply equally well to people from diverse ethnic and cultural backgrounds. In the Cultural Tailoring Study, Dr. Kreuter and his research team are trying to increase the rates of mammography as well as fruit and vegetable consumption by tailoring cancer prevention materials on important attributes of African American culture, including religiosity, collectivism, ethnic identity, and perception of time.

The last aging studies project in the School of Public Health to be discussed here is directed by Dr. Ross C. Brownson, Professor and Chair of Community Health. This innovative study involves environmental and policy interventions to increase physical activity among minority women aged 40-75 years. It is being conducted in several phases. One of the earlier phases involved a nationally representative sample of 1,800 minority women who were interviewed by telephone and asked about their physical activity levels, and a wide variety of demographic, social, and psychological factors that might determine how much physical activity they engaged in. Several important publications have emerged from this phase of the project, including a prize winning paper published in Health Education and Behavior. The data collected from the national determinants phase of the study were then used to develop community-based interventions in the Bootheel and Ozark regions of Missouri. Some of these interventions include the development of walking trails and the establishment of adult group exercise classes in non-traditional settings, like schools and churches. The evaluation of these interventions is now underway. Both mechanical and observational data are being collected to determine the number of women walking on these trails at various times during the day, and on the different days of the week. Trail walking women are being interviewed at selected locations to obtain information about trail usage, and trail likes and dislikes. A follow-up community-based telephone study has also been conducted to determine knowledge of the trails and their use more broadly. Focus groups will also be conducted to identify the most important barriers to trail usage.
Assisted Living

When I am old, I will dwell at the windows
Near a family genealogy, photos, pillows, and pearls.
- Ruth Brent

There are between 20,000 and 40,000 assisted living facilities serving approximately 1 million residents throughout the United States. Less than 10% of the costs of assisted living are paid for by state or federal government funds. Therefore, it is not surprising that the average income of persons living in assisted living is $30,800 with is nearly twice that of the median income ($17,000) for households of people over 80 years of age. The average cost of a private room in assisted living is $72 for a private room compared to $83 for a nurse visit at home, and $111 for private bed/private pay in skilled nursing. Assisted living is at present the major growth opportunity in the long-term care industry.

Saint Louis University provides medical direction and in-home medical care for two NHC assisted living facilities. The medical director’s role includes assessing the appropriateness of the resident to come to and remain in assisted living; to facilitate appropriate care by the primary care provider; to meet with families at family forums; and to oversee employee health.


Criteria for Assisted Living

- Residents must be able to mentally and physically negotiate a path to safety unassisted. They may use assistive devices. They must be able to open the exit door with an understanding that the door goes to the outside of the building.
- They must have a mental understanding of “fire” and “emergency.”
- They must understand the boundaries of the complex and must be able to remember to tell the staff when they are leaving the complex. The doors are not equipped with alarms; therefore, residents must know where they live.
- If they use a wheelchair or an electric cart, they must be able to transfer from that wheelchair or electric cart to a bed or a chair unassisted.
- They must be mentally able to respond to a bowel and a bladder training program if they are having difficulty with continence.
- They must be free from infection or infectious diseases.
- They must not be in need of intermediate or skilled care.
- They must be mentally stable and not a danger to self or others.

(Reprinted with permission from National HealthCare, 1996.)
MEAAA Update

The Mid-East Area Agency on Aging celebrated their 25th Anniversary of helping older adults live independently. Over 230 people attended the silver anniversary banquet in St. Louis. Fox Channel 2 news anchor Tom O’Neal acted as master of ceremonies. Dr. William Keel, MEAAA Executive Director, spoke on the history of the agency, noting that MEAAA has gone from a single senior center, opened in Wentzville, Missouri in 1973 and still in operation today, to 32 centers in 1998. He also said MEAAA, for the first time in its history, served 1 million meals in its recently-ended fiscal year. Dr. John E. Morley spoke on Successful Aging” and praised MEAAA’s senior centers as the best remedy for depression in the elderly. MEAAA has recently moved into their new location, 14535 Manchester Road, Manchester, Missouri and held their open house on November 18. Their new phone number is (314) 962-0808 or 1-800-AGE-6060.

From left: MEAAA Board President Floyd Richards, Fox 2 News Anchor Tom O’Neal, Dr. John E. Morley, and MEAAA Executive Director Dr. William Keel

Find us on the Internet

Aging Successfully can now be found on the worldwide web. To access the newsletter and the archive of earlier issues, go to _________________.

Journals of Gerontology Appoints Editor

As of January 1, 2000, Dr. John E. Morley will be the editor of the Journals of Gerontology: Medical Sciences. This will mean that two of the five journals of the Gerontological Society of America will be edited at Saint Louis University. Fredric D. Wolinsky, Ph.D. edits the Journals of Gerontology: Social Sciences. Dr. Morley is excited to have this opportunity to serve the gerontological community. Among his innovations will be the introduction of rapid communications which can be submitted and reviewed on-line, a move that will place the journal at the front of the move of medical journals into cyberspace.
The M O G G E C Injury Prevention Project presents a new game, Senior Safety Solitaire, that promotes both home and personal safety. This game is designed to provide safety information for older adults, volunteers, para-professionals, and professionals, and can be played by a single player or by a group. Two versions, multi-ethnic and African-American, are available. Please specify which version(s) you wish to purchase. Price: $65 each. $125 for both.

Objectives:
- To increase recognition of the problem of falls.
- To identify intrinsic (personal) and extrinsic (environmental) factors contributing to falls and other injuries around the home.
- To encourage discussion of problem-solving approaches to address identified injury risk factors.
- To increase awareness of community resources which can address the problem areas identified.
- To develop approaches to correct the identified problem areas in the home environment.

To order:
Please send check or money order to:
SLU-HSC
Senior Safety Solitaire
Division of Geriatric Medicine
1402 S. Grand, Room M238
St. Louis, MO 63104
For more information, please call 314-577-8462.
Geriatric Vision 2020: The future history of Geriatrics

Many technical advances can take decades before they come into general use. This column looks at some of the more exciting of these that will eventually revolutionize the care of older persons.

**RETINA IMPLANT SYSTEM:** A German group has developed the microelectronic components for a retina-implant system that will provide visual sensations to patients suffering from photoreceptor degeneration. This single chip can perform at the level of the human eye and can generate electrical impulses to ganglion cells. This Star-Wars type device holds promise as a cure for macular degeneration. For more information, see IEEE Transactions on Circuits and Systems II – Analog and Digital Signal Processing 46:870-7, 1999.

**COMMUNICATION DEVICES FOR PATIENTS WITH “LOCKED-IN” SYNDROME:** Electrodes planted in the midbrain have been used to help persons with the “locked-in” syndrome move a computer cursor to spell names and answer questions. (Emory University and Neural Signals, Inc.) Similarly, externally placed electrodes can also lead to improved computer-assisted communication (University of Tubingen, Germany) and research in monkeys suggests that humans may be able to use the visual cortex to work robotic devices.

**NEW TREATMENT TO MAINTAIN VISION IN PATIENTS WITH MACULAR DEGENERATION:** A light sensitive medication (verteporfin) can be activated by laser light. This substance then destroys diseased tissue and blood vessels, slowing the disease process. Macular degeneration is the leading cause of blindness in older persons. This approach was tested in 600 individuals. For more information, see Archives of Ophthalmology 117:1161-73, 1999.

Geriatrics Expert Sounds Cautious Note

The distinguished medical scientist Professor John E. Morley sounded a note of caution about hormone replacement therapy when he delivered the 1999 Howard Florey Lecture at Adelaide University recently. Professor Morley, one of the world’s leading gerontologists, is Dammert Professor of Gerontology and Director of the Division of Geriatric Medicine at Saint Louis University Medical School in St. Louis, USA.

He has been responsible for fundamental contributions to research, teaching, and patient care relating to the practice of geriatrics, and is actively involved in a variety of collaborative research projects with members of the Department of Medicine at the Royal Adelaide Hospital. His visit to South Australia was sponsored by the Florey Research Fund of the University of Adelaide Medical Foundation.

In his lecture, entitled, “The Hormonal Fountain of Youth,” Professor Morley said that in the modern age of enlightenment, the search was for agents that could regenerate ageing organs and allow the aged to remain functional. He referred to the existence of a number of useful hormonal replacements that appeared to rejuvenate the elderly. But he used the Greek myth of Icarus and Daedalus to illustrate the need for caution. Professor Morley suggested that while modern medicine should reach for the sun to find cures for the ailments of ageing, it should be cautious and not embrace new treatments before their efficacy had been proven. He also believed that inadequate attention was being paid to the well-established principles of geriatrics and that geriatrics needed to take a more prominent role in the teaching of medical students.
Eye Opener (continued from page 13)

about new systemic drugs with ocular side effects. The activities of the day were rounded out by a panel discussion led by Joseph Maino and Marge Hagemann, M.D., Chief of Staff for the St. Louis VA Medical Center on the role of the VA in optometric education. Guest panelists Charles Haine, O.D., Dean of the Southern College of Optometry and part-time VA optometrist in Memphis, TN and Jack Bennett, O.D., Dean of UMSL's School of Optometry added lively and provocative discussion.

Day Two of the conference belonged to faculty from Saint Louis University’s School of Medicine. David Thomas, M.D. gave participants clues for recognizing depression in patients with low vision problems and Hosam Kamel, M.D. talked about recent research on the effects of vision impairment on activities of daily living. The conference ended with Sophia Chung, M.D. giving a fascinating discussion of ocular manifestations of multiple sclerosis (MS), a demyelinating disease of the central nervous system that often presents with ocular manifestations such as vision loss. Magnetization transfer (MT) imaging is being used successfully to provide a quantitative measure of axonal loss of the optic nerve which can be correlated with the degree of visual disability. New treatment protocols suggest that optic neuritis can be treated successfully with IV methylprednisolone if the patient can tolerate it. MS is now known to be more common in patients over the age of 50 than was originally realized. Therefore, in patients over 50 with unexplained loss of vision, a diagnosis of MS-related optic neuropathy should be considered.

The 19th Annual GRECC Symposium is scheduled to take place on April 29-30, 2000. The topic is Complementary and Alternative Medicine. We look forward to seeing you there!

MIMA Conference (continued from page 4)

Minority Aging were recognized by Dr. Dyremple Marsh, Interim Director of Cooperative Extension and long-time friend. Dr. Penn fought back tears as she described the feeling of having a vision come into fruition. Dr. Penn, who attended the Institute for the first time as an attendee remarked, “this is the best conference to date. The overall attendance and quality of workshops was overwhelming.” Dr. Penn, who has been associated with Lincoln University since 1989, retired in June 1999. She is currently enjoying her retirement and living in Jefferson City.

The institute ended on a high note with the soulful sounds of St. Louis’s William Rainer/Jewell Brown United for Christ Community Singers and special guest speaker Reverend Wallace S. Hartsfield, Pastor of the Metropolitan Missionary Baptist Church in Kansas City.

Services

Services of the Division of Geriatric Medicine, Saint Louis University Health Sciences Center includes a General Geriatric Assessment Clinic as well as a number of specialty geriatric clinics in the following areas:

- Bone Metabolism
- Falls: Assessment and Prevention
- Geriatric Diabetes
- Nutrition
- Urinary Incontinence
- Sexual Dysfunction
- Aging and Developmental Disabilities
- Menopause Clinic
- Podiatry Clinic

Clinics are held Monday through Friday in the University Medical Group Building, Suite 204, 3660 Vista Ave., St. Louis, Missouri, 63110. To make an appointment, call (314) 577-6055. Affiliated clinics include:

Geriatric Psychiatry
Saint Louis University Health Sciences Center

For information about any of these clinical programs, contact the Division of Geriatric Medicine at (314) 577-8462

St. Lucy, Patron Saint of Ophthalmology

Questions? FAX: (314) 909-0443
developed diabetic retinopathy which causes blue green colorblindness and might have accounted for some of his color choices in later paintings which became more subdued.

Iatrogenesis has also played a role in the development of painting styles. The Dutch master, Van Gogh, had epilepsy. His physician, Dr. Gauchet, who Van Gogh always paints with a foxglove in hand, treated Van Gogh with digitalis for his epilepsy. “Starry Night” represents a classical example of the haloes seen by an individual with digoxin toxicity (see page 3).

Alterations in vision are also seen when artists’ develop psychiatric conditions such as Alzheimer’s Disease, depression, and schizophrenia. Clearly, both aging and disease have played an important role in the development of the artistic interpretation of the world.

The 21st century vision of the aging artist will perhaps be dramatically different, as scientists at Duke University have just announced the development of a computer chip that implanted in the retina will allow the visually impaired to have their vision restored.
New Cybersite
for Seniors

A new cybersite for seniors has been developed in collaboration with Saint Louis University and the Missouri Gateway Geriatric Education Center.

Besides articles written by geriatric experts, the site provides health updates and an interactive question and answer section. Come visit us at:

www.thedoctorseeyounow.com

Cyberounds Provides On-Line Opportunity for Continuing Medical Education

Dr. John Morley edits the geriatric section of Cyberounds, an internet-based educational program for physicians and other health professionals. Registration is free. Besides regular updates on geriatrics, Cyberounds provides an opportunity to directly ask questions of the Saint Louis University faculty concerning all areas of geriatrics and gerontology. The internet address for Cyberounds is: www.cyberounds.com

We look forward to meeting you in cyberspace!
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Saint Louis University School of Medicine

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