Alzheimer's Disease Research Center (ADRC)
Dementia & Aging Section, Department of Neurology
Washington University School of Medicine
4488 Forest Park Avenue, Suite 101 (MEMORY AND AGING PROJECT/MAP)
St. Louis, MO 63108, 314-286-2683 (MAP) or 314-286-2881 (ADRC)
John C. Morris, MD, Director & Principal Investigator

DEMENTIA ROTATION Training Guide (2011 – 2012): Updated 01/2012

Course Director for Residents/Students: Joy Snider, MD, PhD (314-747-2107; Pager #407-6800, email: sniderj@neuro.wustl.edu).

Orientation and Schedules

Contact Ms. Jennifer Phillips, Education Core Coordinator, to arrange a tour and orientation on your first scheduled day 8:45 am (286-2882; phillipsj@abraxas.wustl.edu). If Ms. Phillips is away or unavailable, contact Mary Coats, MSN, to set up this orientation (286-2303; coatsm@wustl.edu). Clinical observation is an important component of this rotation. You are encouraged to observe as many MAP and ADRC affiliated clinicians (physicians and nurses) as possible during your stay and to participate in as many different clinical settings as possible. You may observe/participate in MAP and/or the Memory Diagnostic Center (MDC). Jennifer will instruct you in how to arrange such observations. The schedule below can serve as a guide to when clinical activities and didactic sessions are available. Dr. Joy Snider provides supervision to medical students and residents on this rotation.

ALL TRAINEES are required to complete a trainee registration sheet and sign a confidentiality statement. Copies may be obtained from Doris at the front desk. Trainees from outside of Washington University (e.g., students from other institutions, international fellows) must complete HIPAA and Human Studies training modules if their rotation is longer than 5 days. See Jennifer to arrange this.

Educational Resources:

- Trainee workstations are behind the half-wall in the waiting room. See Mary or Jennifer for password.
- In addition to the trainee workstations in the waiting room, you may also sit and work in the Physician's Dictation Room.
- ADRC Library *(across from ADRC Office, 130)*
- Patient assessment videotape library *(see Mary Coats for access and direction)*

SCHEDULE OF CLINICAL ACTIVITIES

*You should attend as many clinical activities as possible. Clinic times are subject to change due to vacations, cancellations, etc. so please check the weekly schedule posted in the front office at MAP. Ask Doris Jones for assistance in reviewing the **MAP** (research) schedule and Sherry Ellis for reviewing the **MDC** (clinical) schedule. You can view training videotapes when 'live' clinical activities are not available; see Mary Coats, RN to set this up.*

Monday
8:30am—Nupur Ghoshal, MD, PhD **MDC**
9:30 AM—Joy Snider, MD, PhD **Barnes West County**
1:00 pm -Randall Bateman, MD **MDC (until 11/1/12)**
1:30pm—Nupur Ghoshal MD, PhD **MAP**

Tuesday
9:30 AM - Nupur Ghoshal, MD, PhD **MAP**
9:30 AM - Brianne Disabato MD **MAP**
1:00 PM – Joy Snider, MD, PhD **MDC**
2:00 PM **Parc Provence/Nursing Home Rounds with Dr. David Carr** (check with JoAnn Wilson to verify date and time; jwilson@dom.wustl.edu)

Wednesday
8:30 AM – John Morris, MD **MDC**
9:30 AM – Joy Snider, MD, PhD **MAP**
9:30 AM —David Carr, MD **MAP**
1:30 PM – Gene Rubin, MD, PhD **MAP**

Thursday
9:30 AM - Brianne Disabato MD **MAP**
9:30 AM - Monique Williams, MD **MAP**
12:30 PM – Pam Millsap, RN **MAP**
1:00 PM – David Carr, MD **MDC**

Friday
9:30 AM – John Morris, MD **MAP**
12:00 PM – Randall Bateman, MD **MDC** (beginning 11/1/12)
12:00 PM—Gene Rubin, MD, PhD **MAP**
1:00 PM—David Carr, MD **Barnes West County**

LECTURES (See Checklist** pg 5-6)

Monday
12:00 PM – **Hope Center Seminar,** FLTC-Holden Auditorium
HOPE CENTER WEBSITE

12:00 PM – **Geriatrics Journal Club,** ADRC Conference Room – Email JoAnn Wilson at jwilson@wustl.edu or 286-2909.

Tuesday
9:00 AM – **Psychiatry Grand Rounds,** Clopton Auditorium
For all psychiatry lectures visit the website at http://www.psychiatry.wustl.edu/c/Department/Conferences/default.aspx for the conference topics.

12:00 PM – **ADRC Research Seminar.** East Pavilion Auditorium
http://alzheimer.wustl.edu/Education/Seminar.htm

Wednesday
09:00 AM – **Psych Adv Resident Seminar,** Renard, 3rd Floor Conf Room (Sept-May)

11:30 AM- **Psychiatry Research Seminar**, Holden Auditorium in Farrell (Sept-May)

12:00 PM – **Neurology Residency Clinical Neuroscience Series,** West Pavilion Auditorium

Thursday
12:00 PM – **MAP Clinical Conference,** Chaired by Dr. John C. Morris, ADRC Conference Room

12:00 PM -**Clinicopathological Conference,** 3rd Thursday of each month - ADRC Conference Room

Friday
8:00 AM – **Neurology Grand Rounds,** West Pavilion Auditorium

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OVERALL LEARNING OBJECTIVES FOR RESIDENT AND STUDENT ROTATORS (ALSO SEE ACGME COMPETENCY-BASED OBJECTIVES FOR NEUROLOGY RESIDENTS, pg 13-15):

Objectives for Learning

During this rotation, trainees are exposed to clinical and research methods for the evaluation of older adults with cognitive-functional complaints consistent with Alzheimer's disease and other neurodegenerative disorders. Evaluations are observed live and in-person, as well as via videotape, and cover a range of diagnoses and care issues. Trainees observe clinicians from different specialty backgrounds (Neurology, Geriatrics, Psychiatry) and learn how to administer and score the Clinical Dementia Rating (CDR) interview.

Trainees participate in other educational offerings of the Center, including research seminars and a weekly clinical case conference Enrichment opportunities include evaluating older adults in the long term care setting, exposure to clinical trial methodology, and opportunities to use the resources of the Center in the future to conduct in-depth research on a specific dementia-related topic.

At the end of the rotation, residents/students should:

- Understand basic interviewing techniques to elicit pertinent information from patient and family members in support of a diagnosis.
- Understand symptom patterns that differentiate Alzheimer's disease from related neurodegenerative disorders (i.e., Dementia with Lewy Bodies, Frontotemporal Dementia, Vascular Dementia) and become comfortable making a differential diagnosis in uncomplicated cases.
- Understand the range of treatments currently available for Alzheimer's disease and how they are prescribed.
- Be familiar with broader issues of family and community care for persons with dementia, particularly services available through the Alzheimer's Association.
- Be able to know how to differentiate the key presentations associated with age-related cognitive changes from dementing illnesses
- Be certified in administering the Clinical Dementia Rating

Expectations of Residents/Students

- Residents/students must complete necessary paperwork (and/or training) for compliance with Human Studies and HIPAA regulations by the second day of the rotation.
- Residents/students should dress in professional attire (office casual is acceptable) and wear a lab coat when interacting with patients or research subjects.
- Supervision for this rotation is provided jointly by ADRC Director, Dr. John Morris and by ADRC Clinician, Dr. Joy Snider.
- **Neurology Residents** are required to arrange once-weekly supervision meetings with Dr. Snider. During these meetings, Dr. Snider will review various aspects of dementia diagnosis, treatment and clinical care, and assign further reading.
- **Neurology Residents** are required to develop a case study/case presentation based on a patient or research participant. This could be someone seen during the dementia rotation or during rotations at BJH or other facilities. Residents can choose to highlight a specific syndromic presentation, a situation where imaging and/or fluid biomarkers gave insight, or an interesting clinicopathologic correlation (eg, a case of Whipple's disease presenting as a dementia). Residents should prepare a brief written case report and Power point presentation. Residents will present these cases either at the ADRC noon meeting, or, if possible, as a group at an ADRC noon seminar in the spring.
- **Students** and Residents from other services (Psychiatry, Medicine) rotating for more than two weeks should prepare a brief presentation on some aspect of dementia or cognitive aging. This should be a 25-30 minute Power Point presentation (30 slides max) on a topic related to dementia. See Drs. Joy Snider, David Carr or John Morris for topic suggestions. Presentations will be scheduled during the ADRC noon seminar or the Monday noon geriatrics seminar. SEE BELOW FOR MORE DETAILS.

- At the end of the rotation, residents and students should make an appointment with Dr. Snider for an exit interview.
- To complete and pass this rotation you must also specifically complete the following steps;
    - Complete a multiple choice and true/false test on dementia-related care at the beginning and then at the end of the rotation.
    - Become Clinical Dementia Rating (CDR) certified.
    - Attend clinics at both the Memory and Aging Project and Memory Diagnostic Center.
    - Complete the **checklist (SEE BELOW pg 4-5)** at the end of the rotation.
    - At the end of the rotation, put checklist and pre and post-tests in Dr. Snider's mailbox at MAP.

Two-week DEMENTIA Rotation

- The first week the trainee should complete CDR certification and attend Memory and Aging Clinic rotations. NEUROLOGY RESIDENTS ARE ENCOURAGED TO START AND PREFERABLY COMPLETE ONLINE TRAINING **BEFORE STARTING THE ROTATION**. FOR ONLINE TRAINING CLICK HERE.
- The second week the trainee will attend Memory Diagnostic Center Clinics and arrange Community Visits.

Four-week DEMENTIA Rotation

- First two weeks are the same as the two week rotation.
- Presentations are required (see above).
- During weeks 3-4, students and residents will have more "hands-on" opportunities to interview and examine patients, applying the CDR and interview and examination skills observed in the first two weeks. Students and residents can focus their time on a clinical research project, seeing patients in the MDC, or on outpatient assessments at Parc Provence.

Topic Review and Journal Club Presentation for Medical Students and Psychiatry And Medicine Resident Rotators:

For those trainees on the four week rotation, you will prepare a 25-30 minute power point presentation on a dementia-related topic of your choice. You will present this on a Monday at 12:00 noon at the Older Adult Health Center, 4488 Forest Park, ADRC Conference Room (Basement). Contact Ms. JoAnn Wilson (jwilson@wustl.edu; 286-2909) at the start of your rotation to schedule your presentation.

The first 15 minutes of your presentation will focus on a brief clinical review of the specific content area (e.g. behavioral problems in the elderly); epidemiology, important history, exam findings, differential diagnosis, and if there is time, interventions for common conditions. The last 15 minutes should review a recent article on the topic, preferably one that might change your/our management or treatment of this condition in adults with dementia. Provide your opinion on the strengths and limitations of the article. You should email the article to Dr. Birge one week prior to the discussion at (sbirge@dom.wustl.edu).

Please email the title of your presentation to JoAnn Wilson at (jwilson@wustl.edu) by 3:30 pm on the Wednesday prior to your Monday date. Your Power Point presentation must include the Disclosure Slide (download at http://alzheimer.wustl.edu/Education/Disclosure.ppt) as the 2nd slide (after your title slide). Your Power Point presentation and any articles that you would like copied as handouts should be emailed to JoAnn Wilson by 3:30pm on the Friday before your presentation. Please bring your presentation on a memory stick. Mary will be setting up the laptop in the ADRC Conference Room at 11:50a.

MANDATORY: Because this is a CME activity, residents/students need to complete the speaker disclosure information on line. Presenters need to go to https://cme.wustl.edu and click on "submit disclosures". You should logon by using your email address and the first-time password is "disclose". If you have made a previous disclosure and you do not remember your password, you should contact the CME office at 362-6891 or 362-6521 so your password can be reset. This should be done at least 48 hours prior to your presentation.

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END OF ROTATION CHECKLIST (TWO PAGES)

(TO BE TURNED IN TO DR. SNIDER's mailbox at end of DEMENTIA ROTATION)

PLEASE CHECK ANY OF THE FOLLOWING THAT HAVE BEEN YOUR EXPERIENCE IN REGARDS TO YOUR INSTRUCTION ON THIS ROTATION

SKILLS

I have received instruction during this rotation and/or now have skills in the following areas;

___administering mental status screens
___administering depression screens
___administering the Clinical Dementia Rating (CDR)
___balance and gait assessment
___history taking for dementia evaluations
___pertinent physical exam findings in dementia evaluations
___cost-efficient laboratory and/or radiological w/u for dementia
___current treatment and management of dementia and related disorders
___knowledge of the differential diagnosis for irreversible and progressive neurodegenerative dementias

KNOWLEDGE

Instructed on the diagnosis, evaluation, and management of the following specific dementing illnesses;

___DAT (Dementia of the Alzheimer's Type)
___DLB (Dementia with Lewy Body)
___FTD (Fronto-temporal Dementia)
___CJD (Prion disease)
___NPH (Normal Pressure Hydrocephalus)
___VD (Vascular Dementia)
___MCI (Mild Cognitive Impairment ☺)
___Demonstrate a passing grade on the multiple choice and true/false tests
___Complete the reading list and contribute articles to the list

SETTINGS

I have attended and/or observed dementia care in the following settings (check all that apply);

___Memory and Aging Project Clinics

___Memory Diagnostic Clinics

___Tuesday Noon Research Conference

___Brain Cutting (contact Lisa Taylor-Reinwald at 362-7420)

___Observe in-home dementia assessment (contact Marie Meisel, MSN 612-5911)

___Nursing home visit at Parc Provence (contact JoAnn Wilson at jwilson@dom.wustl.edu)

___Observe family conference in the Memory and Aging project (contact Terri Hosto MSW, 286-2418)

___Learn about psychometric testing for dementia (contact Denise Maue Dreyfus, MA at 286-2688)

___Visit the St. Louis Chapter of the Alzheimer's Association Contact: Cheryl Wingbermuehle, Phone: 314-801-0442. Direct Phone: Call 2 days ahead of time

___Visit a Day Care Center JCCA - Adult Day Care Center; Contact: Deborah Ellis, Phone: 442-3245
Call 2 days ahead of time to schedule observation

WEBSITES

I have visited the following websites (check all that apply):

___Washington University ADRC Home Page: http://alzheimer.wustl.edu/

___Clinical Dementia Rating training page: http://alzheimer.wustl.edu/cdr/Application/ApplicationA.asp

___National Alzheimer's Coordinating Center: http://www.alz.washington.edu/

___Alzheimer's Research Forum: http://www.alzforum.org/

___Alzheimer's Disease Education & Referral Center: http://http://www.alzheimers.org/

___Alzheimer's Association - National: www.alz.org | St. Louis : www.alzstl.org

ATTITUDES

___Your training experience should foster the development of positive attitudes about the importance of a multidisciplinary approach to caring for demented patients and the caregivers, including appropriate respect for other health professionals and paraprofessionals and their roles in the provision of services in addition to respect for the demented patient and their caregiver(s).

___Your training experience should reveal exposure to clinicians that are truly passionate and have a positive attitude toward care for patients and families with dementia.

FEEDBACK/COMMENTS?

ADRC SUGGESTED READINGS: *The ADRC list of articles is suggested reading that is provided to you to highlight some of the major studies from our center as well as some key studies from other groups. If you have an interest in other articles from our center, please email Jennifer Phillips (phillipsj@abraxas.wustl.edu).*

Clinical Dementia Rating/Cognitive Assessment/Neurological Examination

Carpenter BD, Xiong C, Porensky EK, Lee MM, Brown PJ, Coats M, Johnson D, Morris JC. Reaction to a dementia diagnosis in individuals with Alzheimer's disease and mild cognitive impairment. J Am Geriatr Soc 2008; 56:405-412

Galvin JE, Roe CM, Powlishta KK, Coats MA, Muich SJ, Grant E, Miller JP, **S**torandt M, Morris **JC**. The AD8: A brief informant interview to detect dementia. Neurology 2005; 65:559-564.

Hughes CP, Berg L, Danziger WL, Coben LA, Martin RL. A new clinical scale for the staging of dementia. Br J Psychiatry 1982; 140:566-572

Morris JC. The Clinical Dementia Rating (CDR): Current version and scoring rules. Neurology 1993; 43:2412-2414

Morris JC, Berg L, Coben LA, Rubin EH, Deuel R, Wittenborn R, Coats M, Leon S, Norton J. The Clincial Dementia Rating. In: Treating Alzheimer's and other Dementias. Bergner and Finkel (eds) Springer Publishing Co 1995

Preclinical Dementia

Price JL, Morris JC (1999) Tangles and plaques in nondemented aging and "preclinical" Alzheimer's disease. Ann Neurol 45:358-368.

Price JL et al. (2009) Neuropathology of nondemented aging: presumptive evidence for preclinical Alzheimer disease. Neurobiol Aging 30:1026-1036.

Mild Cognitive Impairment

Morris JC**,** Cummings J. Mild Cognitive Impairment (MCI) represents early-stage Alzheimer's disease. Journal of Alzheimer Disease, 2005; 7:235-239.

Storandt M, Grant EA, Miller JP, Morris JC. Longitudinal course and neuropathological outcomes in original versus revised MCI and in PreMCI. Neurology 2006; 67:467-473.

For a different perspective on MCI, relevant papers from other centers:

Fleisher, AS, Sowell, BB, Taylor, C, et al. Clinical predictors of progression to Alzheimer disease in amnestic mild cognitive impairment. Neurology 2007; 68:1588.

Ganguli M, Snitz BE, Saxton JA, Chang CC, Lee CW, Vander Bilt J, Hughes TF, Loewenstein DA, Unverzagt FW, Petersen RC (2011) Outcomes of mild cognitive impairment by definition: a population study. Arch Neurol 68:761-767.

Petersen RC (2011) Clinical practice. Mild cognitive impairment. N Engl J Med 364:2227-2234.

Petersen RC, Parisi JE, Dickson DW, Johnson KA, Knopman DS, Boeve BF, Jicha GA, Ivnik RJ, Smith GE, Tangalos EG, Braak H, Kokmen E (2006) Neuropathologic features of amnestic mild cognitive impairment. Arch Neurol 63:665-672.

Petersen RC, Roberts RO, Knopman DS, Boeve BF, Geda YE, Ivnik RJ, Smith GE, Jack CR, Jr. (2009) Mild cognitive impairment: ten years later. Arch Neurol 66:1447-1455.

Petersen, RC, Stevens, JC, Ganguli, M, et al. Practice parameter: early detection of dementia: Mild cognitive impairment (an evidence-based review). Report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2001; 56:1133.

Visser, PJ, Kester, A, Jolles, J, Verhey, F. Ten-year risk of dementia in subjects with mild cognitive impairment. Neurology 2006; 67:1201.

Biomarkers (Fluid and Imaging) in AD

Fagan AM, Csernansky CA, Morris JC, Holtzman DM. The search for antecedent biomarker's of Alzheimer's disease. Journal of Alzheimer's Disease 2005; 8:347-358.

Fagan AM, Roe CM, Xiong C, Mintun MA, Morris JC, Holtzman DM (2007) Cerebrospinal fluid tau/β-amyloid$_{42}$ ratio as a prediction of cognitive decline in nondemented older adults. Arch Neurol 64:343-349.

Fagan AM, Head D, Shah AR, Marcus D, Mintun M, Morris JC, Holtzman DM (2009) Decreased cerebrospinal fluid Abeta(42) correlates with brain atrophy in cognitively normal elderly. Ann Neurol 65:176-183.

Galvin JE, Price JL, Yan Z, Morris JC, Sheline YI (2011) Resting bold fMRI differentiates dementia with Lewy bodies vs Alzheimer disease. Neurology 76:1797-1803.

Mintun MA, LaRossa GN, Sheline YI, Dence CS, Lee SY, Mach RH, Klunk WE, Mathis CA, DeKosky ST, Morris JC. [^{11}C] PIB in a nondemented population: Potential antecedent marker of Alzheimer disease. Neurology 2006; 67:446-452 Neurol 2007; 64:343-349.

Snider BJ, Fagan AM, Roe CM, Shah AR, Grant EA, Xiong C, Morris JC, Holtzman DM (2009) Cerebrospinal fluid biomarkers and rate of cognitive decline in very mild dementia of the Alzheimer's type. Archives of Neurology 66:638-645.

A somewhat dated but still excellent review of CSF biomarkers:

Hansson O, Zetterberg H, Buchhave P, Londos E, Blennow K, Minthon L (2006) Association between CSF biomarkers and incipient Alzheimer's disease in patients with mild cognitive impairment: a follow-up study. Lancet Neurol 5:228-234.

Driving and Dementia

Carr DB, Duchek j, Meuser T, Morris JC. Older adult drivers with cognitive impairment. American Family Physician 2006; 73:1029-1034.

Carr DB, Meuser TM, Morris JC. Driving retirement: the role of the physician. Commentary;CMAJ 2006; 175:601-602. PMC1559414.

Papers from other groups on driving and dementia:

Dubinsky, RM, Stein, AC, Lyons, K. Practice parameter: risk of driving and Alzheimer's disease (an evidence-based review): report of the quality standards subcommittee of the American Academy of Neurology. Neurology 2000; 54:2205.

Ott, BR, Heindel, WC, Papandonatos, GD, et al. A longitudinal study of drivers with Alzheimer disease. Neurology 2008; 70:1171.

GENERAL DEMENTIA REFERENCES you might find helpful:

Mental Status Examination

There are good chapters on the mental status examination in many neurology texts, including DeJong's The Neurologic Examination and DeMyer's The Neurologic Examination:A Programmed Text. For students, there is a chapter on the mental status examination in DeGowin's Diagnostic Examination, Ninth Edition. The textbook Neurobehavioral Disorders, A Clinical Approach by Richard L. Strub and F. William Black is a classic, but a bit dated now (© 1988).

Other Dementias

Dementia with Lewy Bodies

Galvin JE, Pollack J, Morris JC**.** Clinical phenotype of Parkinson disease dementia. Neurology 2006; 67:1605-1611.

McKeith IG et al. (2005) Diagnosis and management of dementia with Lewy bodies: third report of the DLB Consortium. Neurology 65:1863-1872.

McKeith IG et al. (1996) Consensus guidelines for the clinical and pathologic diagnosis of dementia with Lewy bodies (DLB): report of the consortium on DLB international workshop. Neurology 47:1113-1124.

Merdes, AR, Hansen, LA, Jeste, DV, et al. Influence of Alzheimer pathology on clinical diagnostic accuracy in dementia with Lewy bodies. Neurology 2003; 60:1586.

Noe, E, Marder, K, Bell, KL, et al. Comparison of dementia with Lewy bodies to Alzheimer's disease and Parkinson's disease with dementia. Mov Disord 2004; 19:60.

Tarawneh R, Galvin JE. Distinguishing Lewy body dementias from Alzheimer's disease. Expert Rev. Neurotherapeutics 2007 11:1499-1516.

Weisman D, McKeith I (2007) Dementia with Lewy bodies. Semin Neurol 27:42-47.

Other Parkinsonian Dementias (PSP, MSA, OPCA, CBD)

Litvan I, Bhatia KP, Burn DJ, Goetz CG, Lang AE, McKeith I, Quinn N, Sethi KD, Shults C, Wenning GK (2003) Movement Disorders Society Scientific Issues Committee report: SIC Task Force appraisal of clinical diagnostic criteria for Parkinsonian disorders. Mov Disord 18:467-486.

Litvan, I, Agid, Y, Jankovic, J, et al. Accuracy of clinical criteria for the diagnosis of progressive supranuclear palsy (Steele-Richardson-Olszewski syndrome). Neurology 1996; 46:922.

Van Deerlin VM, Wood EM, Moore P, Yuan W, Forman MS, Clark CM, Neumann M, Kwong LK, Trojanowski JQ, Lee VM, Grossman M (2007) Clinical, genetic, and pathologic characteristics of patients with frontotemporal dementia and progranulin mutations. Arch Neurol 64:1148-1153.

Wenning GK, Litvan I, Tolosa E (2011) Milestones in atypical and secondary Parkinsonisms. Mov Disord 26:1083-1095.

Frontotemporal Dementias

Boxer AL, Miller BL (2005) Clinical features of frontotemporal dementia. Alzheimer Dis Assoc Disord 19 Suppl 1:S3-6.

Josephs, KA. Frontotemporal lobar degeneration. Neurol Clin 2007; 25:683.

Kertesz, A, Blair, M, McMonagle, P, Munoz, DG. The diagnosis and course of frontotemporal dementia. Alzheimer Dis Assoc Disord 2007; 21:155.

Neary, D, Snowden, J, Mann, D. Frontotemporal dementia. Lancet Neurol 2005; 4:771.

Rosen, HJ, Hartikainen, KM, Jagust, W, et al. Utility of clinical criteria in differentiating frontotemporal lobar degeneration (FTLD) from AD. Neurology 2002; 58:1608.

Vascular Dementia/Mixed Dementias

Ivan, CS, Seshadri, S, Beiser, A, et al. Dementia after stroke: The framingham study. Stroke 2004; 35:1264.

Langa, KM, Foster, NL, Larson, EB. Mixed dementia: emerging concepts and therapeutic implications. JAMA 2004; 292:2901.

Leys, D, Henon, H, Mackowiak-Cordoliani, MA, Pasquier, F. Poststroke dementia. Lancet Neurol 2005; 4:752.

Roman GC, Tatemichi TK, Erkinjuntti T, Cummings JL, Masdeu JC, Garcia JH, Amaducci L, Orgogozo JM, Brun A, Hofman A, et al. (1993) Vascular dementia: diagnostic criteria for research studies. Report of the NINDS-AIREN International Workshop. Neurology 43:250-260.

Vermeer, SE, Prins, ND, den Heijer, T, et al. Silent brain infarcts and the risk of dementia and cognitive decline. N Engl J Med 2003; 348:1215.

Vascular Risk factors in AD and other dementias

Kivipelto, M, Helkala, EL, Laakso, MP, et al. Midlife vascular risk factors and Alzheimer's disease in later life: longitudinal, population based study. BMJ 2001; 322:1447.

Verdelho, A, Madureira, S, Ferro, JM, et al. Differential impact of cerebral white matter changes, diabetes, hypertension and stroke on cognitive performance among non-disabled elderly. The LADIS study. J Neurol Neurosurg Psychiatry 2007; 78:1325.

Young, VG, Halliday, GM, Kril, JJ. Neuropathologic correlates of white matter hyperintensities. Neurology 2008; 71:804.

HIV-Associated Dementia

Ances BM, Christensen JJ, Teshome M, Taylor J, Xiong C, Aldea P, Fagan AM, Holtzman DM, Morris JC, Mintun MA, Clifford DB (2010) Cognitively unimpaired HIV-positive subjects do not have increased 11C-PiB: a case-control study. Neurology 75:111-115.

Berger, JR, Brew, B. An international screening tool for HIV dementia. AIDS 2005; 19:2165.

Cysique, LA, Maruff, P, Brew, BJ. Prevalence and pattern of neuropsychological impairment in human immunodeficiency virus-infected/acquired immunodeficiency syndrome (HIV/AIDS) patients across pre- and post-highly active antiretroviral therapy eras: a combined study of two cohorts. J Neurovirol 2004; 10:350.

Gray, F, Chretien, F, Vallat-Decouvelaere, AV, Scaravilli, F. The changing pattern of HIV neuropathology in the HAART era. J Neuropathol Exp Neurol 2003; 62:429.

Transient Global Amnesia

Bartsch T, Deuschl G (2010) Transient global amnesia: functional anatomy and clinical implications. Lancet Neurol 9:205-214.

Butler CR, Zeman A (2008) A case of transient epileptic amnesia with radiological localization. Nat Clin Pract Neurol 4:516-521.

Hodges JR, Warlow CP (1990) Syndromes of transient amnesia: towards a classification. A study of 153 cases. J Neurol Neurosurg Psychiatry 53:834-843.

Quinette P, Guillery-Girard B, Dayan J, de la Sayette V, Marquis S, Viader F, Desgranges B, Eustache F (2006) What does transient global amnesia really mean? Review of the literature and thorough study of 142 cases. Brain 129:1640-1658.

Roach ES (2006) Transient global amnesia: look at mechanisms not causes. Arch Neurol 63:1338-1339.

Ryoo I, Kim JH, Kim S, Choi BS, Jung C, Hwang SI Lesion detectability on diffusion-weighted imaging in transient global amnesia: the influence of imaging timing and magnetic field strength. Neuroradiology.

Diagnostic Criteria for Dementia

New 2011 criteria for dementia, mild cognitive impairment and preclinical dementia:

Albert MS et al. (2011) The diagnosis of mild cognitive impairment due to Alzheimer's disease: recommendations from the National Institute on Aging-Alzheimer's Association workgroups on diagnostic guidelines for Alzheimer's disease. Alzheimers Dement 7:270-279.

Jack CR, Jr. et al. (2011) Introduction to the recommendations from the National Institute on Aging-Alzheimer's Association workgroups on diagnostic guidelines for Alzheimer's disease. Alzheimers Dement 7:257-262.

McKhann GM, et al. (2011) The diagnosis of dementia due to Alzheimer's disease: recommendations from the National Institute on Aging-Alzheimer's Association workgroups on diagnostic guidelines for Alzheimer's disease. Alzheimers Dement 7:263-269.

Sperling RA et al. Toward defining the preclinical stages of Alzheimer's disease: recommendations from the National Institute on Aging-Alzheimer's Association workgroups on diagnostic guidelines for Alzheimer's disease. Alzheimers Dement 7:280-292.

Criteria for AD and other dementias:

American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 4th Edition. Text Revision. Washington, D.C.: American Psychiatric Association, 2000.

Litvan I, Bhatia KP, Burn DJ, Goetz CG, Lang AE, McKeith I, Quinn N, Sethi KD, Shults C, Wenning GK (2003) Movement Disorders Society Scientific Issues Committee report: SIC Task Force appraisal of clinical diagnostic criteria for Parkinsonian disorders. Mov Disord 18:467-486.

McKeith, IG, Galasko, D, Kosaka, K, et al. Consensus guidelines for the clinical and pathologic diagnosis of dementia with Lewy bodies (DLB): report of the consortium on DLB international workshop. Neurology 1996; 47:1113.

McKeith IG et al. (2005) Diagnosis and management of dementia with Lewy bodies: third report of the DLB Consortium. Neurology 65:1863-1872.

Roman GC, Tatemichi TK, Erkinjuntti T, Cummings JL, Masdeu JC, Garcia JH, Amaducci L, Orgogozo JM, Brun A, Hofman A, et al. (1993) Vascular dementia: diagnostic criteria for research studies. Report of the NINDS-AIREN International Workshop. Neurology 43:250-260.

Dementia Therapies

Qaseem, A, Snow, V, Cross, JT Jr, et al. Current pharmacologic treatment of dementia: a clinical practice guideline from the American College of Physicians and the American Academy of Family Physicians. Ann Intern Med 2008; 148:370.

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SPECIFIC ACGME CORE COMPETENCIES GOALS AND OBJECTIVES FOR RESIDENTS (PGY3-4):

Patient Care
Goal: The resident rotating on the ADRC rotation must be able to obtain a comprehensive interview with a caregiver and patient/participant that is compassionate, appropriate, and effective for the management of dementia and the promotion of health. Residents are expected to:
Objectives

- Understand basic interviewing techniques to elicit pertinent information from patient and family members in support of a diagnosis.
- Be able to perform a standard neurological examination with a focus on those important physical findings that assist in the differential diagnosis of determining the etiology of the dementias.
- Learn to administer the Clinical Dementia Rating (CDR) scale and to assess the presence and severity of dementing disorders.
- Be able to distinguish normal age-related cognitive changes from those suggestive of a progressive neurodegenerative disorder.
- Be able to assess for the presence of delirium, medication-induced cognitive dysfunction and mood disorder induced changes in cognition.
- Participate in clinical and research assessments of older adults with cognitive-functional complaints consistent with Alzheimer's disease and other neurodegenerative disorders. Residents will observe evaluations live and in-person, as well as via videotape, and cover a range of diagnoses, treatment, and care issues.
- Observe clinicians from different specialty backgrounds (Neurology, Geriatrics, Psychiatry).

Medical Knowledge
Goal: The resident rotating on the ADRC rotation must demonstrate knowledge of the differential diagnosis of irreversible degenerative dementias and be able to communicate an effective treatment plan for the management of dementia. Residents are expected to:
Objectives

- Understand symptom patterns and physical exam signs that differentiate Alzheimer's disease from related neurodegenerative disorders (i.e., Dementia with Lewy Bodies, Frontotemporal Dementia, Vascular Dementia) and be comfortable making a differential diagnosis in uncomplicated cases.
- Understand the range of treatments currently available for Alzheimer's disease and how they are prescribed.
- Understand the symptoms and findings that are suggestive of rapidly progressive dementias such as Creutzfeldt-Jakob disease.
- Be aware of emerging treatments and diagnostic modalities, including fluid biomarkers and amyloid imaging.
- Be familiar with health conditions of aging that may complicate Alzheimer's disease presentation and strategies for the management of challenging conditions, such as depression and behavioral problems.

Practice-based Learning and Improvement
Goal: The resident rotating on the ADRC rotation must demonstrate the ability to investigate and evaluate their care of dementia patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation. Residents are expected to develop the following skills;
Objectives

- During the rotation the resident should use internet-based, peer-reviewed sources of information to enhance their knowledge of current issues and management of patients with dementia
- All residents should understands his or her limitations of knowledge and judgment; ask for help when needed; and be self-motivated to acquire knowledge
- Accept feedback and learn from own errors
- The resident will develop a dementia case presentation that will be presented either at the end of the rotation or as part of an ADRC research seminar in the spring. The case presentation will serve as a teaching tool and will be added to the residents case portfolio and the ADRC teaching case collection.
- Residents must complete necessary paperwork (and/or training) for compliance with Human Studies and HIPAA regulations by the second day of the rotation.
- Residents participate in other educational offerings of the Center, including research seminars, a weekly clinical case conference, and neuropathology microscopic and brain cutting sessions.

Interpersonal and Communication Skills
Goal: The resident rotating on the ADRC rotation must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients or participants, their families or caregivers, and health professionals. Residents are expected to:
Objectives

- Demonstrate caring and respectful behaviors with patients, families, including those who are angry and frustrated; and all members of the health care team.
- Know the basics of counseling and educating patients with dementia and their families.

Professionalism
Goal: The resident rotating on the ADRC rotation must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate:
Objectives

- Demonstrate respect, compassion, and integrity.
- Develop an appreciation for a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and other aspects of clinical care.
- Develop an appreciation for the ethical, cultural and socioeconomic dimensions of dementia, demonstrating sensitivity and responsiveness to patients' culture, age, gender, and disabilities.

Systems-based Practice
Goal: The resident rotating on ADRC rotation must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. Residents are expected to:
Objectives

- Be familiar with broader issues of family and community care for persons with dementia, particularly services available through the community and the Alzheimer's Association.
- Work effectively with others (such as nurses, secretaries, social workers, nutritionist, interpreters, physical and occupational therapists, technicians) as a member of a health care team
- Learn how to manage patients in long term care facilities and nursing homes
- Learn about community resources that can assist dementia patients such as hospice, home health, palliative care, and community outreach.
- Advocate for quality patient care and assist patients in dealing with system complexities
- Know the cost-effective use of diagnostic technology in the evaluation of dementia (e.g. PET scan, LP, EEG, etc).