

## Guidelines Differentiate Alzheimer Dementia and Disease

New guidelines released on July 8 by the National Institute on Aging (NIA) and the Alzheimer's Association contained revised criteria on neuropathologic assessment and autopsy that seek to distinguish Alzheimer dementia from the range of pathologic changes known to precede and accompany that dementia and that collectively are called Alzheimer disease (AD). The 2 groups previously issued recommendations on refining diagnosis to emphasize the need to differentiate dementia associated with AD from other dementias and to incorporate new scientific data on the progression of the disease (*J Nucl Med.* 2011;52[6]:22N). The draft neuropathologic guidelines include significant revisions to the most recent (1997) guidelines. In general the guidelines reflect a consensus that criteria should be data based, focus primarily on neuropathologic rather than clinical criteria, and, to the extent possible, reflect current "molecular understanding" of disease mechanisms.

The revised criteria provide new benchmarks for assessing AD neuropathologic change and emphasize the importance of "evaluating non-AD brain lesions in recognition of commonly comorbid conditions in cognitively impaired elderly," noting that "pathologic findings for all potentially contributing diseases need to be recorded and then integrated

with clinical findings in the neuropathology report for each person." Specific criteria are given for assessing and rating neurofibrillary tangles, abnormal  $\tau$  accumulation, and amyloid- $\beta$  plaques in AD, as well as for identifying and documenting other common forms of dementia.

The draft criteria also recommend that genetic risk and biomarkers (chemical and neuroimaging) be used in research settings to complement neuropathologic data for the post-mortem diagnosis of AD. The authors note, however, "that no single finding or combination of findings from these modalities currently is known to define better the disease state than neuropathologic examination." "Someday biomarkers are probably going to replace pathology," said Creighton Phelps, MD, of the NIA's division of neuroscience, in an interview at the Alzheimer's Association International Conference in Paris, France, on July 17. At the same conference, numerous presenters referenced the potential for advanced imaging techniques to not only explore the stages of AD but also provide valuable data on pathologic changes that precede and accompany various stages of dementia.

*National Institute on Aging  
Alzheimer's Association*

## MOLECULAR IMAGING UPDATE

### CMIIT Award Winners

This year's SNM Annual Meeting initiated a new Young Investigator Award Symposium and new awards for molecular imaging laboratory professionals. The winners of the new CMIIT Lab Professional Recognition Award are: Alex Zheleznyak of Washington University (St Louis, MO) and Véronique Dumulon Perreault from the Sherbrooke Molecular Imaging Centre at the University of Sherbrooke (Canada). Alex's award is in recognition of his work in "In vivo imaging of  $\alpha_4\beta_1$ -expressing cell components of the premetastatic niche with a high-affinity PET ( $^{64}\text{Cu}$ ) tracer and in vivo imaging of early osteolytic bone metastases with  $^{64}\text{Cu}$ -c (RGD) tracer targeting of osteoclasts." Véronique's award is in recognition of her work on "Bifunctional chelates for  $^{64}\text{Cu}$  radiolabeling of BBN peptides for PET imaging, a comparative study." They each received \$1,500 travel awards to attend the 2011 SNM Annual Meeting in San Antonio, TX. This award will be offered again next year, and we look forward to receiving applications in the fall.

I am pleased to announce this year's 2011 CMIIT Young Investigator Award winners. Our first place winner was Gesche Gornik, MD, for "Evaluation of the GRPR radioantagonist  $^{64}\text{Cu}$ -CB-TE2A-AR-06 in mice and men." Second place went to Jason Lee, MD, for "Tumor metabolic phenotyping and treatment stratifica-

tion by positron emission tomography." Third place was awarded to Nina Urban, MD, for "The 5-HT<sub>2A</sub> receptor and serotonin transporter in ecstasy users evaluated with  $^{11}\text{C}$ -MDL 100907 and  $^{11}\text{C}$ -DASB." We thank all of the outstanding presenters who participated in the symposium.

As we look forward to 2012, we have an exciting lineup of activities planned. A summit on amyloid imaging will take place at our Mid-Winter Meeting in Orlando, FL, January 27–29; a multimodality cardiovascular molecular imaging symposium will be held at the National Institutes of Health Natcher Center on April 19 and 20; and exciting nuts-and-bolts translational continuing education sessions at the SNM Annual Meeting will be held June 9–13 in Miami, FL. Special membership rates for a new SNM membership category for laboratory professionals are still available. For more information visit: [www.snm.org/join](http://www.snm.org/join).



**Carolyn J. Anderson, PhD**

*Carolyn J. Anderson, PhD  
President, CMIIT*