



# Division of Clinical Neuropsychology Newsletter 40

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## President's Message

Dear Colleagues:

One of the indulgences granted to the office of Division 40 President is the opportunity to write several missives for this Newsletter that are hopefully both thought provoking and informative. In the last issue of the Newsletter, I wrote a brief note outlining in broad strokes four facets of a comprehensive strategy I feel is important for the continued professional health of neuropsychology as we enter the 21<sup>st</sup> century. These facets include: differentiation of our Professional Identity, increased Public Awareness, generation of Empirical Information and Research that is consumer friendly, and creation of coherent Professional Practice Policies. I would like to expand on two of these in this issue.

What is our *professional identity*? As a relatively young discipline in its adolescence, neuropsychology has worked hard to achieve a unique identity through a process of professional individuation not dissimilar to that in which our adolescent children are currently engaged. When asked what we do, most of us reply without hesitation that we are *neuropsychologists* – we are *different* from other psychologists. We take great pride in our designation as an APA specialty, and revel in the fact that we have national and international organizations that are specifically and solely devoted to the advancement of neuropsychological science and practice. While the end goal is that of a professionally mature discipline with coherent education and training models, standards for credentialing and certification, and empirically based practice guidelines, the process is not without “growing pains.”

While some degree of sibling rivalry facilitates the process of individuation, all too often we have become mired in petty bickering that has drained our energies and diverted our attention from larger issues such as *who is our rightful peer group*? If we accept that “the neuropsychologist specializes in the application of assessment and intervention principles based on the scientific study of human behavior across the lifespan as it relates to normal and abnormal functioning of the central nervous system” (Hannay, Bieliauskas, Crosson, Hammeke, Hamsher, & Koffler, 1998, p. 161), do we see ourselves as behavioral scientists who are primarily aligned with psychiatry and mental health

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Back issues of the division 40 Newsletter are now available on line at the Division 40 Archives website at Louisiana State University.

The URL address is:

<http://www.lib.lsu.edu/special/findaid/apa/print.html>

## From The Editor

With this edition of Newsletter40, I would like to pay special thanks to all of our contributors. This current issue brings what we think is some interesting reading in our regular columns. Our new Division President, Dr. Gordon Chelune presents his presidential article, and in Science Scene, Dr. George Prigatano writes about the importance of understanding ‘unawareness syndromes’ in our patients. Drs. Steven Anderson and Hanna Damasio present a fascinating case of hyperphagia associated with neurological disorder, and Dr. Brad Axelrod writes about the issue of demographic corrections in neuropsychology. Thanks also to our contributors from Division 40 committees, Drs. Puente and Naugle and of course, our minutes from the business meeting and Executive Committee meetings at APA. We always have some announcements, and sadly, one concerns the passing of one of our more prominent members. We hope you enjoy this issue of your Newsletter and, as always, we continue to welcome correspondence from our readership.

Joel E. Morgan, Ph.D.  
Associate Editor

### Announcement

It is with sadness that *Newsletter40* announces the passing of one of our most distinguished members, Laird Cermak, Ph.D., who died on November 4, 1999. Dr. Cermak earned his Ph.D. at The Ohio State University in experimental psychology in 1968. He was a Career Research Scientist at the Boston VA Medical Center, Professor of Neurology at Boston University School of Medicine, and Editor of *Neuropsychology*. Dr. Cermak had a long and influential research and teaching career in memory disorders, collaborating with Dr. Nelson Butters, among many others. His wife, Dr. Sharon Cermak, and four children survive Dr. Cermak. *Newsletter40* plans a special tribute to the memory of Dr. Cermak in the next issue.

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## Clinical Corner

### Hyperphagia Following Prefrontal Cortex Damage

Steven W. Anderson, Ph.D., ABPP and Hanna Damasio, M.D.  
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Division of Behavioral Neurology and Cognitive Neuroscience  
The University of Iowa College of Medicine  
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Food consumption is determined by a complex interaction of multiple factors, including cognitive, physiological, and environmental influences, the mechanisms of which remain largely unknown. Although neural processes must play an integral role in the regulation of eating behaviors, there has been limited investigation of eating disorders related to brain damage in humans. It is known that both in humans and other species, hypothalamic and mesial temporal lobe damage can disrupt eating behavior (e.g., Burns et al., 1990; Coffey, 1989; Reeves and Plum, 1969). In rats, the prefrontal cortex also contributes to the regulation of food intake. For example, orbital prefrontal lesions result in aphagia (Kolb et al., 1977), and in a rat model of binge eating there is an increase in prefrontal dopamine release and metabolism (Inoue et al., 1998).

In recent years, we have observed several patients who developed hyperphagia in the setting of damage to prefrontal regions. Hyperphagia, the pathological overconsumption of food, results in obesity and associated medical problems. To illustrate this condition following damage to the prefrontal region under a variety of circumstances, we describe below 3 patients with hyperphagia in association with: a) prefrontal damage acquired in adulthood, b) prefrontal damage acquired in infancy, and c) progressive dementia with frontal atrophy. No other medical causes were responsible for the eating disorders in any of the cases.

**Patient A** was a college-educated businesswoman who had normal eating habits until age 48, when a gunshot wound damaged both frontal lobes (see Figure). Prior to the injury, she did not overeat and was not overweight. Her food choices were healthy, with a preference for salads and low calorie fare. Her eating behavior changed dramatically as she emerged from the acute recovery phase following the injury. She began to show a strong preference for high-fat and high-salt content foods. For example, she would eat several large bags of potato chips in a day, and she would ignore all other food until she had consumed all available French fries. Although her tendency was to eat constantly if food was accessible, she no longer would eat salads or vegetables (previously her preferred foods) without considerable prompting. She was hyperresponsive to food advertising and other food-related cues. For example, any sight of popcorn on TV or in a magazine would reliably elicit a trip to the microwave oven to make a bag of popcorn, even if several had already been consumed that day. She began to gain considerable weight (approximately 70 pounds) before her husband was able to impose strict constraints on her access to food.

**Patient B** underwent resection of a tumor in the right frontal lobe at age 3 months (see Figure), and displayed abnormal eating behavior from early childhood. If food was available and there were no major distractions or constraints on his behavior, he would eat during most of his awake time, showing little discretion in food choice. Beginning as a young child, he frequently would pick up and consume discarded food items, for example, chewed gum found under a bench. This occurred in the context of normal development of intelligence, language, and memory, and despite punishment contingencies and greater than normal instruction in hygiene. He never consumed nonfood items, but he readily ate inappropriate foods (e.g., raw frozen meat, entire jars full of condiments such as mayonnaise). Despite medically guided diet plans and parental constraints on his eating habits, he was obese throughout childhood, and became

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## Demographic Corrections and Interpretation of Test Scores

Bradley N. Axelrod

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The procedure of a “demographic adjustment” usually means that the raw score obtained from a patient on a specific task is transformed to a standardized score which incorporates relevant information in the transformation of the score. Such information often includes the age, gender, and educational attainment of the patient. The inclusion of demographic information in the interpretation of raw scores has become a heated topic of late in the area of neuropsychological assessment. One school of thought opines that “impairment is impairment” and the age, gender, and educational level of a patient is irrelevant once a patient suffers neurocognitive impairment. They believe that an impaired individual obtains an impaired score, regardless of the patient’s demographic profile. On the other hand, the opposing position is that it is not possible to determine if a patient has cognitive impairment unless performance is evaluated relative to demographic peers. Furthermore, by failing to incorporate relevant demographic information, the potential for false positives in elderly, poorly educated patients and for false negatives in highly educated adults is great. In this article, I hope to briefly comment on issues pertaining to adjusting scores based on demographic data.

Since the development of the first measure of intelligence by Alfred Binet, psychologists have understood the necessity of incorporating demographic information in the interpretation of test performance. It was those early psychologists working with children who understood that a specific raw score from a test has different meaning, depending on the demographic makeup of the child. Remember, the original “quotient” for calculating intelligence was based on the ratio of intellectual age to chronological age. Two children obtaining the same intellectual age could have widely different IQs if their chronological ages were different. The development of the Wechsler Intelligence Scales (WIS) followed this line of thinking. These scales compute summary scores via the use of age-specific norms. Currently, raw scores are converted to age-scaled scores, and then those sum of age-scaled scores are used in the computation of intelligence and factor scores. This method for calculating scores clearly makes adjustments based on the age of the individual. Without stating so explicitly, summary scores from the WIS incorporate a demographic (age) correction.

The adjusting raw scores based on demographic data has spread beyond measure of intellectual functioning. Measures of achievement (e.g., WRAT-3, PIAT-R), vocabulary (e.g., PPVT-3), and memory (e.g., CVLT, WMS-3, Rey Complex Figure Test) incorporate age into the transformation of a raw score into a standardized score. Some neuropsychological measures are corrected for demographic information in addition to age. For example, the Wisconsin Card Sorting Test (Heaton, Chelune, Talley, Kay, & Curtiss, 1993) adjusts scores for age and education level. The regression based norms for Trail Making Test, Finger Oscillation Test, and Grooved Pegs (Heaton, Grant, & Matthews, 1992) adjust raw scores for age, education, and gender in the generation of standard scores.

The complexity in the application of normative based standardized scores is in the inconsistency in which demographic information is included. Naïve professionals could easily compare scores from the WAIS-3 and WMS-3 to performance on the Trail Making Test. However, the former two tests have scores which are normed within the context of age alone and the latter test is normed adjusting for age, education, and gender. As a result, standardized scores from these two tasks should not be compared directly to each other. When presenting this idea for publication, one reviewer stated that reminding professionals that standardized scores may not be comparable is a “blinding glimpse of the obvious.” Be that as it may,

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## Science Scene

### **Syndromes of Impaired Awareness after Brain Injury\***

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Disorders of self-awareness are common after many forms of brain injury, but they are poorly understood and managed (Prigatano, 1999). Disorders of self-awareness are extremely difficult to measure because they represent a disturbance of personal experience that science, as of yet, cannot directly measure.

By following brain dysfunctional patients from a few days after the onset of their brain insult to months or years thereafter, three basic facts begin to emerge. First, these disorders are dynamic, that is, they change with time and environmental demands. Second, damage to different regions of the brain seems to cause different forms of impaired awareness. Thus, one can observe changing syndromes of impaired awareness after various forms of brain pathology. Third, as disorders of personal experience or consciousness, disorders of self-awareness do not appear to be purely cognitive dysfunctions. Rather, they seem to represent some disturbance of the integration of thinking with feeling. This point is extremely important because it suggests that patients must be approached from both cognitive and affective perspectives to help them improve self-awareness after injury. This observation leads to another important corollary. Human consciousness seems to emerge when thinking and feeling are integrated. With these three observations in mind, it is no wonder that performance on traditional neuropsychological tests \* often has no correlation or only a very weak correlation with clinical observations of disorders of self-awareness.

Recently, I have attempted to categorize disorders of self-awareness as “complete” or “partial” (see Prigatano, 1999). In a complete syndrome of impaired self-awareness, one observes the phenomenon of classic anosognosia. Such individuals have no awareness (i.e., experience) of a disordered neurological or neuropsychological function. Theoretically, cerebral dysfunction must be bilateral for a complete syndrome of impaired awareness to be observed. This criterion presents a paradox because computed tomographic findings of such individuals often reveal only unilateral lesions.

I have argued (see Prigatano, 1999) that unilateral lesions actually produce bilateral dysfunction, as evidenced by both behavioral and neuroimaging studies, particularly during the acute stages after the onset of a brain disorder. For example, patients who have a unilateral cerebrovascular accident often show bilateral slowing in terms of speed of finger tapping (Prigatano and Wong, 1997). Finger tapping in the so-called unaffected hand, which is, in fact, affected, often improves in patients who achieve their rehabilitation goals. Second, patients with a unilateral lesion who demonstrate hemineglect often initially show bilateral hypometabolic activity (Perani et al., 1993). In two case examples, one patient whose hemi-inattention later improved regained normal metabolic activity in the so-called unaffected hemisphere. The other patient, whose hemi-inattention did not improve, demonstrated ongoing bilateral hypometabolic activity even though neuroimaging showed only a unilateral lesion.

These findings have important implications for patients with a severe traumatic brain injury. If these patients have severe bilateral diffuse dysfunction, they may well show very little awareness of their deficits with the passage of time. However, individuals who recover some function in one hemisphere or in certain portions of a damaged hemisphere may well experience subtle improvement of their impaired awareness. Their syndrome is therefore partial. Before describing how individuals cope with a partial syndrome of

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**Revising the Ethical Principles of Psychologists and Code of Conduct**

Richard Naugle, PhD, ABPP-CN  
Chair, Division 40 Ethics Committee

The APA Ethics Committee is currently in the process of revising the *Ethical Principles of Psychologists and Code of Conduct* (1992). Some of the suggested revisions to the code were described in the July/August 1999 issue of the *APA Monitor*. Among the revisions described in that article was new wording regarding the release of raw test data. The current wording reads: “Psychologists refrain . . . from releasing raw test results or raw data to persons . . . who are not qualified to use such information.” The APA task force reviewing the code proposed adding the following: “except as required by statute or court order or to an attorney or court based on a client release.”

A second issue that was raised pertains to the practice of conducting psychological assessments. It has been suggested that patients undergoing psychological assessments first be required to provide informed consent prior to the assessment except when testing without consent is mandated by law, when testing is part of regular school activities, or when informed consent is “clearly implied.”

The *Monitor* article ended with an invitation to submit comments to the APA’s Office of Ethics. The Ethics Committee of Division 40 contacted APA’s Office of Ethics to inquire about the time line for the revision and the committee’s receptivity to comments and reactions. In fact, these and other suggested revisions had elicited a large response from those who had read the article. Several individuals expressed concern that the release of raw test data to attorneys would potentially place information in the hands of individuals not qualified to understand those data or the importance of maintaining test security. APA’s Ethics Committee planned to review those comments at its October meeting. Reactions received from this point on will be reviewed at subsequent meetings.

The Committee’s plan at this time is to develop a draft that incorporates respondents’ comments and to publish that first draft in the *Monitor* by the end of 2000. At that time, further comments and reactions will be invited from readers. Assuming a significant response to its contents, one or more additional drafts would be published in later issues of the *Monitor*, and readers will again be invited to comment. It is obvious that this entire process is intended to span many months and will provide ample opportunity to provide reactions to suggested changes.

Division 40’s Ethics Committee will continue to monitor the suggestions for revision and will provide information regarding any developments to future issues of *Newsletter40*. Individuals wishing to comment about the suggestions are invited to respond directly to the Division 40’s Ethics Committee by writing to me at the Cleveland Clinic Foundation, 9500 Euclid Avenue (P57), Cleveland OH 44195 (e-mail: [naugler@ccf.org](mailto:naugler@ccf.org)) or by contacting other members of the Committee, including Drs. Bruce Becker, John McSweeny, and Lidia Artiola.

<p>Announcement</p> <p>Byron P. Rourke, Ph.D. is the recipient of the 1999 Canadian Psychological Association’s Donald O. Hebb Award for Distinguished Contributions to Psychology as a Science. This is the most prestigious scientific award that CPA confers. He also received the CPA award for Distinguished Contributions to Psychology as a Profession in 1994, and was elected a Fellow of the Royal Society of Canada in 1997.</p>
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## Clinical Neuropsychology and the North Carolina Psychology Practice Act

Robert L. Conder, Patrick E. Logue and Antonio E. Puente

In February 1997, the North Carolina Court of Appeals (COA) issued a ruling which seriously affected the practice of neuropsychology. At that time, in reviewing a lower court case, the COA stated in a split decision that the original trial judge erred in allowing a neuropsychologist to testify that a plaintiff did not have an organic brain injury. The COA, following the *Chandler Exterminators v. Morris et al* 1992 decision ruled that the diagnosis of traumatic brain injury was a medical diagnosis in that "... medical causation is not a subject within the scope of the psychologist's expertise." The court also reviewed the specific statutes governing the practice of psychology in North Carolina, specifically North Carolina General Statute 90-270.2. The court noted that while the statutory language allowed psychology for the "... diagnosis and treatment of mental and emotional disorder or disability...", it is evident that the practice of psychology does not include the diagnosis of medical causation. That is, the court reiterated the notion that the diagnosis of brain injury was a diagnosis of medical causation, and the North Carolina statute specifically prohibited psychology from practicing either medicine or optometry. The court did find that "...the properly qualified neuropsychologist is competent to testify as an expert about psychological and emotional conditions of a patient without expressing an opinion as to the organic causes of these conditions. Likewise, the neuropsychologist would be competent to testify as an expert that the psychological and emotional conditions of a patient are not consistent with other patients who have been medically diagnosed with brain injuries." The court further noted that the statutes of the North Carolina Practicing Psychology Act included no specific definition of neuropsychology, while using the term several times. Finally, the court stated that it was their belief that "...the privileges and limits of the psychology profession are primarily matters to be determined by a legislature. Any extension of such privileges and limits must be made by legislative action, not court decision."

The minority decision in this case held that Federal and North Carolina Rules of Evidence, commonly known as Rule 702, allows the trial judge wide latitude in considering expert testimony that would potentially be helpful to the trier of fact. The judge further stated that "it is enough that the expert witness, because of his expertise, is in a better position to have an opinion on the subject than is the trier of fact." He also cited extensive case literature where non-physicians, such as nurses, were "...qualified to render expert opinions as to medical causation, even though they are not medical doctors." However, the majority decision held. Neuropsychologists were prevented from diagnosing the etiology of traumatic brain injuries. An additional problem arose in that the negative impact of this case generalized eventually to forensic psychology, where these psychologists were prohibited from rendering opinions in cases involving such diagnoses as mental retardation or post traumatic stress disorder.

Due to the seriousness of this ruling, several neuropsychologists contacted the North Carolina Psychological Association (NCPA) to ask for their assistance in appealing the Court of Appeals ruling to the North Carolina State Supreme Court. In doing so, NCPA contacted the Practice Directorate of APA. At the urging of several parties, an Amicus brief was jointly filed by APA, NCPA and the National Academy of Neuropsychology (see [Neuropsychology Review](#), 9, 11 for the text of this brief). The organizations filed a well-written brief that argued that the neuropsychologist's testimony should be admissible under the Rules of Evidence (Rule 702). Additionally, extensive case law was cited which supported the precedent that licensure as a physician is not required for testimony regarding medical causation. Finally, the Health Services Provider section of the North Carolina Psychology Act was cited as giving statutory authority for the diagnosis of TBI.

In July 1998, the North Carolina Supreme Court reversed the Court of Appeals ruling on a technicality, stating that the plaintiff's attorney did not object to the neuropsychologist's testimony at trial, such that this could not serve as a basis for appeal. However, the Supreme Court did not address any of the neuropsychological issues contained therein, and the matter remained in dispute.

After this ruling, there appeared to be only one direct remedy for addressing this court case and its adverse effect on neuropsychology: the revision of the North Carolina Psychology Practice Act. However, this was seen by many persons in the psychology leadership as a drastic action, in that a revision of the Psychology Practice Act might have unintended adverse effects, as there were other psychology groups with political agendas separate from this issue.

Less drastic measures were first tried. Initially, NCPA developed a neuropsychology concern group that brainstormed and generated alternatives. After review of the North Carolina Medical Practice Act, it was noted that there were 14 exemptions to this Medical Practice Act, including chiropractors, dentists, midwives and spiritualists. But, psychology was not exempt. This group decided to propose a revision to the Act and approached the North Carolina Medical Society, but their response was overwhelmingly negative.

The North Carolina Neuropsychological Society (NCNS) was formed at the NCPA 50th anniversary meeting by Tony Puente, Pat Logue, Tony Sciara, and Bob Conder. NCNS' chief goal was to create a cohesive body to address the multiple needs and concerns of neuropsychologists in the state of North Carolina. Membership was voluntary, without cost, and the only requirements were that a person be a member of Division 40 and/or the National Academy of Neuropsychology. Leadership of the NCNS believed early that a legislative change was the only method, and worth the risk. As such, NCNS became an advocacy group. However, NCNS was without the major legislative resources of NCPA. We addressed the NCPA leadership once again, coordinating this time with the Law-Psychology Committee of NCPA, which also included members of NCNS. The leadership of the Law-Psychology

Committee, traditional forensic psychologists, realized that the ramifications of the Court of Appeals case was not limited to neuropsychology or to forensic psychology, but adversely affecting the profession of psychology as a whole. The two groups advocated within NCPA for the executive committee to vote for revision of the Psychology Practice Act.

Concomitantly, other approaches were taken to assist in remediation of this matter. The NCNS approached the Institute of Government at the University of North Carolina-Chapel Hill School of Law, where district court judges receive continuing education, and provided much material on neuropsychology as a science and profession, contradictory to the rulings by the Court of Appeals. This material became part of the education of Superior Court judges in North Carolina. Additionally, NCNS approached the Legislative Committee of the North Carolina Academy of Trial Lawyers (NCATL). NCATL agreed that the exclusion of neuropsychologists from assisting the trier of fact was in error, and agreed to study and possibly support any such revisions legislatively. Finally, the executive committee of NCPA agreed that a revision of the Psychology Practice Act was in the best interest of the practice of psychology in North Carolina.

The drafting of specific changes in the statutes was delegated to the Law-Psychology Committee. There, a collaborative and iterative effort between members of Law-Psychology and NCNS resulted in a drafting of legislation which would work within the existing Psychology Act, and address the concerns raised by the Court of Appeals. In doing so, a primary factor was that such legislation be a clarification of the existing practice act, and not an expansion of practice. The North Carolina Medical Society (NCMS) again raised concerns about changes in the Psychology Practice Act. Members of the NCNS then communicated with the leadership of the North Carolina Neurological Society, a division of the North Carolina Medical Society. The leadership of the North Carolina Neurological Society saw that the change in the Psychology Practice Act was not an invasion of the practice of medicine, and stated their support for such act. The

executive committee of the North Carolina Academy of Trial Lawyers also approved the legislative changes and through their pro bono committee, gave legislative support through their lobbyists to this. Finally, NCPA once again approached APA, who graciously gave financial support for the legislative lobbying effort. Additionally, some of the membership of NCNS had extensive personal legislative contacts, which were activated. This included not only personal contacts with legislators, but members of NCNS being available at the North Carolina General Assembly when critical committee votes were taken. As such, with this collaborative effort, the neuropsychological changes to the Psychology Practice Act passed both the Senate and House of the North Carolina Legislature with absolutely no opposition, eg, no opposing votes.

The specific changes to the Practice Act had to be couched within existing statutory language. As such, it may appear awkward to the reader, especially those in other states. Two primary revisions to the existing act were made. One included defining “diagnosis” to include both etiology and prognosis, as these have been objected to under case laws. Additionally, the term “neuropsychological” was added to existing language defining psychology as competently dealing with “... physical illness, accident, injury or disability.” Finally, a collaborative and iterative definition of the term “neuropsychological” was written to address this specific case. “Neuropsychological” is now statutorily defined as “pertaining to the study of brain-behavior relationships, including the diagnosis, including etiology and prognosis, and treatment of the emotional, behavioral, and cognitive effects of cerebral dysfunction through psychological and behavioral techniques and methods.”

Neuropsychologists in other states need to be familiar with both the statutory and case law governing the practice of neuropsychology. This challenge to neuropsychology is not limited to North Carolina, but is currently a legal tactic to diffuse neuropsychological testimony. Other states such as Missouri has had this situation remedied through the Court, and have not had to turn to this extensive legislative action. However, be prepared for such

challenges to practice in your state.

A final editorial word appears relevant here. In forming the North Carolina Neuropsychological Society, we were interested in inclusion and not exclusion, to include members from various theoretical and practical approaches to neuropsychology. This collaboration is what has made our group successful. As can be seen from the preceding, the collegial collaboration with parallel organizations was vital for passage of this legislation. Without this, we would not have been successful. At this point in the history of neuropsychology, there were challenges both from within (theoretical and practical) and without (managed care and legal). Challenges from within appear trivial when compared to the challenges from without, which seek to greatly restrict if not nullify our scientifically based practice. As stated by Thomas Payne, a famous American patriot, “We must hang together, or most assuredly we will all hang separately.” “Hanging together” appears to be a much more admirable way to proactively respond to this vexing situation. Psychologists are not known for their ability to effectively work collectively in the public arena. Fortunately, this broadly based effort was an exception to that observation. To appropriately preserve our profession, we will have to do better at perceiving our common interests as well as our hotly debated differences.

graduate students should explicitly hear the message and professionals could use the reminder.

Within the field of neuropsychology, many of the assessment measures have been developed, enhanced, or renormed to incorporate demographic information into adjusted scores. However, even for measures which are adjusted using the same demographic parameters, the resulting normative databases may not be comparable. So clinicians should be cautioned against the “knee jerk” response of assuming that newer and bigger data sets can immediately be used as a direct comparison to performance on another task. Not only can the demographic makeup of the participants in a data set not be comparable, but in their computation some normative databases are based on actual mean performance of normal controls, while others are regression based. These differences across normative samples and calculations can generate alternative standard scores with the same raw score. Authors of some measures (e.g., Rey CFT, WCST) have taken to including a set of census matched norms in addition to demographically adjusted norms. The addition of the census norms allows for different tests to be compared using the same metric.

Psychological and neuropsychological evaluations require the comparison of test performance to demographic peers as well as the comparison across different tests within an individual. The former evaluation places the individual in the context of expected performance relative to other of the same gender, education, and age. The incorporation of all of these factors in comparing individuals to their peers is important in such an evaluation. In contrast, the assessment of strengths and weaknesses within an individual does not require demographically adjusted standardized scores. Instead, a common metric (e.g. census matched norms) may also be utilized. The consideration of a patient’s demographic profile is important in the interpretation of test performance. It is up to our profession to ensure that we achieve that end as we evaluate patient data, write reports, and assess existing psychometric literature.

Some of the material presented here was

discussed in more depth in:

Axelrod, BN (1996). Age and education: Is it correct to correct? The Clinical Neuropsychologist, 10, 352.

Axelrod, BN & Goldman, RS (1996). Use of demographic correction in neuropsychological interpretation: How standard are standard scores? The Clinical Neuropsychologist, 10, 159-162.

Vanderploeg, RD, Axelrod, BN, Sherer, M, Scott, JG, & Adams, RL (1997). The importance of demographic adjustments on neuropsychological test performance: A response to Reitan and Wolfson (1995). The Clinical Neuropsychologist, 11, 210-217.

Clinical Corner  
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progressively more so as he gained independence in late adolescence and early adulthood. He consumed large quantities of high-fat and high-sugar content foods. He did not drink alcohol or use illicit drugs, but he did smoke cigarettes daily.

**Patient C** was a college educated businessman who had normal eating habits until his mid-40's. In the context of a progressive frontal dementia (see Figure), gradual onset of hyperphagia was noted. The first subtle signs of dementia, increased passivity and lapses of judgement, had appeared approximately 4-5 years prior to the change in his eating behavior. He began to eat with increasing frequency at a stage where the behavioral problems had resulted in the loss of his job as president of a construction company and considerable disruption of his family life. The primary factor determining food selection appeared to be availability. He began to eat large quantities of snacks from vending machines and, in between meals, to purchase additional complete meals at drive-through fast-food restaurants. He seemingly would eat any food at any time, usually in large quantities. For example, he would eat several hotdogs for breakfast. He gained more than 50 pounds before his wife was able to implement sufficient constraints on his eating behavior to stabilize his weight.

### Discussion

The development of hyperphagia following prefrontal damage suggests that at least parts of this cortex are important in the homeostatic regulation of food consumption, functioning as components of a network which also includes the hypothalamus and mesial temporal regions, structures which receive direct projections from the frontal lobes (e.g., Chavis & Pandya, 1976; Van Hoesen, Pandya & Butters, 1975). The means by which prefrontal damage disrupts eating remain to be determined. The physiological mechanisms for weight maintenance are designed to guard against undernutrition (Blundell & King, 1996), and it seems likely that certain of the sequelae of prefrontal damage (e.g., diminished inhibitory control, stimulus-bound behavior, perseverative tendencies) might interact with this bias toward overconsumption. Persons

with prefrontal damage also are insensitive to the long-term consequences of their behavior, and therefore vulnerable to overindulgence in behaviors with immediate reward value (e.g., Bechara et al., 1994; Damasio, 1994; Anderson et al., 1999). In all three patients, hyperphagia appeared in the context of significant decision-making impairments in other daily activities. In the most general terms, hyperphagia is a sign of impaired homeostatic control, the higher aspects of which require the sort of emotional regulation that the prefrontal cortex can help provide (Damasio, 1999).

Prefrontal dysfunction also may interact with damage in other brain regions to produce hyperphagia. It has been shown that densely amnesic patients may consume a second full meal immediately following a first, suggesting that conscious memory of what has been eaten contributes to the termination of eating (Hebben et al., 1985; Rozin et al., 1998). Although amnesia is not necessary for hyperphagia to appear following prefrontal damage, it could contribute to the problem, e.g., in the context of dementia or combined damage to the orbital prefrontal region and the basal forebrain.

Neuropsychologists routinely inquire about changes in patients' appetite and possible weight gain, usually in consideration of depressive symptoms or metabolic disruption, and most often through interviews with patients and self-report questionnaires. In patients with known or suspected frontal lobe damage, it also may be useful to interview collaterals regarding changes in eating behavior. The patients described here did not have insight into their cognitive or behavioral problems, including their eating behaviors. Limiting access to food through considerable vigilance from their caretakers was moderately successful in managing the eating behavior of 2 of our cases. Further investigation, including functional imaging and controlled studies of patients with focal lesions, will be necessary to help define the linkage between frontal lobe dysfunction and abnormal eating behavior, and to explore possible implications for other eating disorders, such as bulimia.

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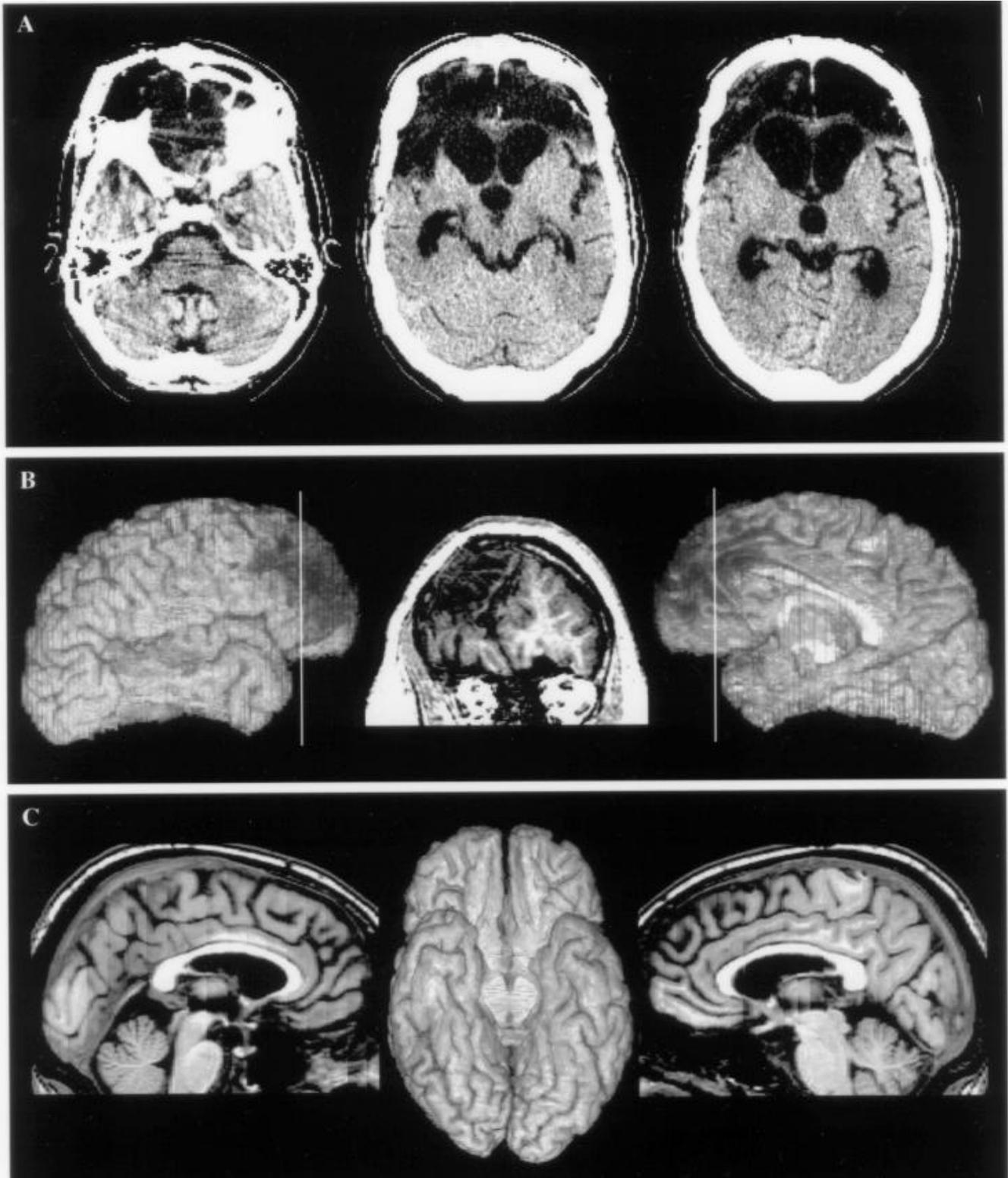
**Figure On Next Page**

**A.** CT images of patient A with extensive damage to the prefrontal region of both hemispheres. **B.** Lateral and mesial views of the right hemisphere of patient B, reconstructed from thin-cut MR images using Brainvox (H. Damasio & Frank, 1992), and a coronal view at the level marked on the hemispheres, showing extensive damage to polar, mesial, and lateral prefrontal regions in the right. **C.** Mid-sagittal and ventral views of the reconstructed brain of patient C, showing atrophy in the prefrontal region bilaterally.

Table 1. Selected neuropsychological findings

	<u>Case A</u>	<u>Case B</u>	<u>Case C</u>
Neurological exam	anosmia	normal	anosmia
WAIS-R VIQ/PIQ	88 / 60	94 / 104	110 / 94
Rey AVLT	5 / 28	12 / 30	6 / 24
CFT	22 / 13	31 / 24	32 / 20
BVRT	4 / 9	6 / 5	7 / 4
COWA	17	27	46
TMT	120 / 175	30 / 60	35 / 63
WCST	0 / 36	6 / 8	2 / 39
BDI	11	5	7

Note: Rey AVLT = 30' recall (15 possible) / 30' recognition (30 possible). CFT = Rey-Osterrieth Complex Figure Test, copy score / 30' recall. BVRT = Benton Visual Retention Test, number correct / number of errors. COWA = Controlled Oral Word Association, corrected raw score. TMT = Trailmaking Test, number of seconds Part A / Part B. WCST= Wisconsin Card Sorting Test, number of categories / perseverative errors. BDI=Beck Depression Inventory.



impaired awareness, another distinction must be made.

If human self-awareness is an emergent brain function that depends on brain regions that integrate thinking and feeling, then dysfunction in the four primary heteromodal cortical regions may produce four corresponding syndromes of impaired awareness. Mesulam (1985) has suggested that the large regions of the brain previously referred to as association cortex are better termed heteromodal cortex. These regions integrate information from sensorimotor regions with information from the paralimbic belt. Depending on the other psychological functions mediated by these regions of integration, different forms of self-awareness emerge. I have suggested that the following four syndromes of impaired self-awareness can thus be observed: a frontal heteromodal syndrome, a parietal heteromodal syndrome, a temporal heteromodal syndrome, and an occipital heteromodal syndrome.

The frontal lobes are important for activities such as planning, social judgment, impulse control, anticipation, and “sustaining drive.” When the frontal lobes are injured, individuals may not experience themselves as having impairments in these areas.

As well as integrating complex sensorimotor information, the parietal lobe is important to the perception of one’s limbs in space. Individuals with an impairment in this region may show frank anosognosia for hemiplegia. They can also show anosognosia for hemi-inattention.

The temporal lobe is a complex region that involves many different sensory inputs and integrates these inputs with deep brain structures. This integration permits memory and language to function, particularly in the left hemisphere. Consequently, lesions in the temporal lobe are often associated with a lack of insight about the extent of a memory or language impairment. A classic example of a complete temporal heteromodal syndrome is anosognosia for jargon aphasia. Individuals with injuries to the temporal heteromodal cortex also may completely lack insight into the presence and extent of their memory

impairments. Patients in the early stages of Alzheimer’s disease, for example, may attribute slight changes in their perceived memory to normal aging rather than being alarmed by a rapid and significant decrease in their memory capacity. When parietal and temporal areas are impaired, a mixture of syndromes emerges. Such individuals may be disoriented about time and place but not aware of their difficulty. They may attribute their problems to factors other than themselves.

The occipital heteromodal region is important for vision and the perception and recognition of visual objects. The most startling example of impaired awareness from an occipital heteromodal syndrome is cortical blindness in individuals who fail to experience the blindness personally. Historically, this condition has been referred to as Anton’s syndrome. As such individuals improve, they may exhibit partial awareness of impaired visual functions.

Individuals with a complete syndrome exhibit no emotional distress because they have no awareness or experience of their cognitive deficit. As they obtain partial information, they partially experience their disturbance. In such cases, individuals may exhibit some affective reaction and may cope with their partial knowledge either defensively or nondefensively.

When coping nondefensively, individuals may recognize that a deficit exists but consider the deficit to have minimum impact. They rely on their premorbid methods of coping, even though those methods may be unreliable or unsafe. For example, a university professor with a right parietal lesion may recognize that he has subtle problems with attention, organization, and the ability to conceptualize how to present a lecture. Yet he may insist that he can return to teaching, which has been his method of coping with problems in the past. He may report that he is single or divorced and that his major source of personal gratification has been to educate young people. Depriving him of teaching would eliminate a major source of meaning in his life. Consequently, he would resist any discussion that he should not return to teaching. His resistance is not a defense mechanism per se. Now that he only partially experiences his difficulty, he is simply

relying on a previous method of coping that has served him well.

There are also defensive methods of coping with partial knowledge of a deficit. In such cases, individuals experience a threat and the threat produces anxiety and raises concerns about the integrity of the self. Consequently, individuals will attempt to reduce that anxiety and may use many types of defense mechanisms to do so. Denial is common but not the only defensive measure observed. For example, individuals also may use projection to cope with anxiety. I have seen patients with left temporal lesions who are partially aware of their residual language and memory deficits who later develop paranoid ideation. Thus, anosognosia and the later development of delusions may be connected in some patients, particularly those with a left temporal lobe injury (see Prigatano, 1988).

If this simple model proves to be heuristic in classifying impairments of self-awareness after brain injury, it may lead to a better understanding of the phenomenon of denial or other unconscious defense mechanisms observed in psychiatric illness. Theoretically, the same heteromodal cortical regions that allow self-awareness to emerge may be involved in keeping certain thoughts and feelings from awareness even though individuals remain conscious of their environment. Designing studies to reveal this possibility is challenging. It seems probable, however, that mechanisms that produce disturbances of self-consciousness after brain injury must be involved in psychological defense mechanisms and perhaps rely on similar if not the same brain structures and activities. By studying disturbances of self-awareness and their various manifestations, new insights into how to treat and manage these disturbances during acute, intermediate, and postacute phases after brain injury may be gained.

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\* For a more complete discussion of this topic, see Prigatano, 1999; *Principles of Neuropsychological Rehabilitation*, Oxford University Press, New York.

or as neuroscientists living in the house of medicine. Some might suggest that we are both. But can we have it both ways? Should our procedural codes be listed among psychiatric services or among neurological procedures, and should we use medical diagnoses or mental health diagnostic codes? Like the adolescent who has an emerging sense of personal identity but still lacks a firm grasp of social obligation and responsibility, clinical neuropsychologists often can better define *who* we are than *how* we fit into the larger picture of health care. As a result it is difficult to develop coherent professional practice policies without a clear sense of how we uniquely contribute to health care.

To further extend the analogy of neuropsychology's transformation from adolescence into young adulthood, it strikes me that neuropsychology has been quite egocentric and narcissistic in our initial search for professional identity. That is, we have sought to achieve our specialty status by pulling away from and distinguishing ourselves from other aspects of psychology. While such centrifugal tendencies are important to establish autonomy and independence, left unchecked they can also lead to isolation and an inflated sense of entitlement. In becoming a truly mature profession, we have a professional responsibility to represent the voice of neuropsychology within the larger scope of organized psychology (and health care), not as distinct from it but as part of it. Indeed, this is the mission of the Division of Clinical Neuropsychology – to integrate and advance the interests and priorities of neuropsychology as *part of*, rather than *apart from*, those of the American Psychological Association. This is true on an individual level as well. Each of us, as neuropsychologists, can advance and promote the professional identity of neuropsychology by becoming active members in our local professional organizations. For neuropsychology to be recognized as a unique specialty by those outside our own circles, we must be willing to bring our skills and unique perspective to their table.

The second consideration for maintaining our

professional health into the 21<sup>st</sup> century, and related to our professional identity, is the need to better integrate *outcomes research* into our daily practice of neuropsychology. There is a common fiction that research and practice are orthogonal activities performed by different groups of neuropsychologists. Those who publish their research are labeled “academics” and are cast as having little or no understanding of the practical issues facing the day-to-day “practitioner.” The distinction is often thrown out as a straw man issue by those who wish to draw lines amongst us, usually for political reasons. In reality, neuropsychology is deeply rooted in the scientist-practitioner model, and most who publish their research do so on the patients they see clinically. The real issue is not that there are two different types of clinical neuropsychologists, but rather that research findings are not reported with clinical practice in mind nor is practice conducted with a “research mind set.” The problem is not specific to neuropsychology (see Wilkinson & the Task Force on Statistical Inference, 1999), but is one that we all need to address.

If one scans the table of contents of virtually any neuropsychology journal, there are generally one or more papers that have direct bearing for clinical practice. Knowing that patients with early Alzheimer's disease perform more poorly than age-matched normal controls on sentence comprehension (Croot, Hodges, & Patterson, 1999) or that children with early onset hydrocephalus of infantile versus congenital etiologies show different motor function profiles (Hetherington & Dennis, 1999) is of clinical interest. However, clinical practice is based on individual prediction, and it is difficult to apply the results from group data as they are traditionally reported. Those who study problems of clinical interest and publish their findings could greatly enhance the empirical basis and outcomes accountability of our clinical practices by simply re-packaging or extending their research reports to include such information as base rates, sensitivity and specificity data, and relative risk estimates along with the usual tests of significance. It is far more practical for the practitioner to know the base rates of a particular impairment in a clinical sample compared to normals or the relative risk or odds of a

particular disorder given a specific pattern of test findings than to simply know that groups differ at  $p < .01$ . It is far easier to defend the cost effectiveness of our work if we can link it to outcomes data: e.g., “the relative risk of early Alzheimer’s disease in light of these test results is 6.7 times higher than in the general population in this age group.” Look for Division 40 to begin advocating for and sponsoring such outcomes-oriented research beginning with Program 2000 in Washington, D.C. this summer (contact Joe Ricker, Division 40 Program Chair for more details).

Those who publish research and those who use research to guide their clinical practice share a common interest in **research**. Research is not synonymous with publishing. Research is a mind set that we all should share. As a dear friend once told me: “*Research is nothing more than making one’s professional opinions and observations publicly verifiable.*” Is this not what we do as clinicians every time we write a report? Is this not the essence of good clinical practice? Consider the Table below. The parallels between a generic clinical evaluation and the scientific method are striking. Every patient evaluation should be an experiment. If we engage in “outcomes accountability and management” as advocated by the HMO movement (Johnson, 1997), we can generate our own practice-specific base rate findings and reports (e.g., how often do children referred for “attention-deficit” symptoms show evidence of co-morbid learning disorders?) that can be used to justify our methods of practice. If neuropsychology is to survive as a reimbursable health care service *we must research what we practice, and practice in accord with our research.* (See Table Below)

In summary, it is clear that we must be proactive if we are to ensure our professional health in the 21<sup>st</sup> century. It is also clear to me that to be heard we must participate. How and where we choose to participate is still uncharted, but now is the time for us to be thinking about it. Likewise, we must begin to develop a user-friendly research literature that both documents the efficacy and cost-effectiveness of our services and facilitates empirically based practice. Hopefully my comments here have provided you with some food for thought and perhaps some ideas for action.

Sincerely,

Gordon J. Chelune, Ph.D.  
President, Division 40

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Hetherington, R., & Dennis, M. (1999). Motor function profile in children with early onset hydrocephalus. Developmental Neuropsychology, 15, 25-51.

**Table. Every Patient Evaluation is an Experiment**

	<b>Clinical Practice</b>	<b>Scientific Experimentation</b>
1	Presenting Problem/Complaints	Research Question/Problem
2	History & Physical	Gather Background Information
3	Formulate Working Diagnosis	Formulate Hypothesis
4	Generate Treatment Plan & Goals	Devise Methods & Procedures/Criteria
5	Treat the Patient	Conduct the Experiment/Gather data
6	Determine if Treatment Was a Success	Analyze Data
7	Terminate if Treatment was Successful/ Reconsider the diagnosis and/or treatment plan	Reject the Null Hypothesis/ Modify the hypothesis and/or design a new experiment

Johnson, L.A. (1997). Outcomes management a decade out: An interview with Paul Ellwood. Group Practice Journal, 46, 12-15.

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ANNOUNCEMENT

DIVISION 40 EARLY CAREER AWARD

Division 40 announces the Early Career Award in Neuropsychology for an APA member psychologist not more than ten years post doctoral degree and who has made a distinguished contribution to neuropsychology in research, scholarship, and/or clinical work.

A letter of nomination and three supporting letters (at least two from nationally-known neuropsychologists familiar with the candidate's work and its impact on the field) should be included along with five copies of 1) a CV, 2) three supporting documents (e.g., major publications; research grants; assessment, clinical or teaching techniques; treatment protocols) providing evidence of national/international recognition, and 3) the candidate's 500 word statement describing professional accomplishments, personal long-term goals, and future challenges and directions in the field of neuropsychology that they wish to address.

The awardee receives a certificate and \$1000 and will be invited to present a paper at the August, 2000 APA convention. The deadline is January 5, 2000.

Send nominations to: Ida Sue Baron, Ph.D., ABPP, Chair, Division 40 Awards Committee, 10116 Weatherwood Court, Potomac, MD 20854.

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Executive Committee Meeting Minutes

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Women: Dr. Marcotte reported for Dr. Shear. There has been minimal activity from the APA Committee on Women in Psychology that is directly pertinent to Division 40 activities. However, there is considerable interest within the Division in identifying and addressing prominent issues that affect women in neuropsychology. A number of Division 40 members already have expressed interest in participating in activities related to women's issues. As an initial step, a survey will be developed and included in a future Division mailing that will solicit input from members about aspects of women's training, professional development, and practice in neuropsychology that may be facilitated by Division activities.

29. International Liaison: Dr. Lidia Artiola has been working with Drs. Marcotte and Chelune to clarify the role of the Liaison and to begin efforts.

30. Dr. Puente then reviewed for the EC recent efforts in North Carolina to ensure that neuropsychologists can testify as to causation in neuropsychological cases. The North Carolina Psychological Association and the North Carolina Neuropsychological Society joined efforts to introduce a bill to this end, which was passed by the State legislature. Dr. Puente requested that the Division sent a letter of recognition to these groups for these efforts, which the EC approved. Dr. Puente will draft the letter for Dr. Chelune's review.

31. APA Call for Editor of Neuropsychology: APA has announced that it will be seeking a new Editor for Neuropsychology, which Laird Cermak currently serves as Editor. Dr. Brandt has been asked by President-Elect Chelune to spearhead efforts on behalf of the Division, which will offer names and letters of support for possible Editor candidates.

32. Other Business: Dr. Chelune noted that it has been five years since the last Division 40 Planning Committee meeting, which led to a reorganization of the Division. He is contemplating reconvening a Planning Committee to examine the state of the Division five years into the reorganization and to determine if it is on target in meeting its goals articulated in the last Planning Committee Report. He will be discussing this with EC members in the upcoming weeks.

30. The EC will next meet in February, 2000 in conjunction with the Annual North American Meeting of the International Neuropsychological Society in Denver, Colorado. There being no other business, the meeting was adjourned at 5:50pm.

Respectfully Submitted,  
Ann C. Marcotte, Ph.D.  
Secretary, Division 40

**DIVISION 40 EXECUTIVE COMMITTEE MEETING MINUTES**  
**Friday, August 20, 1999**  
**Beacon Room B, Sheraton Boston Hotel**  
**Boston, Massachusetts**

Present: Baron, Bauer, Becker, Berent, Berg, Bieliauskas, Blau, Chelune, Cripe, Cullum, Dede, Eubanks, Fischer, Hamsher, Heaton, Mapou, Marcotte, Morgan, Nemeth, Puente, Reynolds, Ricker, Smith, Van Gorp.

Invited Guests: Brandt, Yeates

Absent: Artiola, DeLuca, Fennell, Meneese, Shear, Wilson

1. The meeting was called to order by Dr. Reynolds at 3:00 pm.

2. Minutes of the Executive Committee (EC) meeting held in February, 1999 were reviewed and approved without modifications.

Since the February 1999 EC meeting, several pieces of business were conducted over electronic mail. The EC voted to approve a proposed Division 40/National Academy of Neuropsychology (NAN) Professional Practice Survey and to allocate up to \$4000.00 of Division 40 funds to the project. Funds will also be contributed to the project by NAN. The EC also voted to approve the formation of an ad hoc Committee on Empirically Supported Practice to be chaired by Dr. Robert Heaton. Serving on this committee will be Drs. Cecil Reynolds, Erin Bigler, Glenn Larrabee and Jeffrey Barth.

3. Treasurer's Report: Dr. Van Gorp presented the Treasurer's Report for the fiscal year as of July 15, 1999. Dr. Van Gorp reported that Division 40 continues to be in excellent financial state. As of July 15, 1999, Division 40 had total assets of \$233,315.31 (\$193,213.95 cash on deposit at APA; \$40,101.36 in a Certificate of Deposit at Southern Pacific Thrift and Loan). Expenses for 1999 to date are well within the fiscal budget of \$62,315.00, although Dr. Van Gorp reminded the EC that most expenses are incurred at and after the Annual Convention.

Dr. Van Gorp next presented the proposed budget for fiscal year 2000. The proposed budget totaled \$77,375.00, with a new line item for the Committee on Empirically Supported Practice (\$9,000.00), and increased budgets for the office of the Secretary, Science Committee, Education Committee, and Archivist. After discussion, the EC approved the budget.

4. Council Representatives' Report: Drs. Puente made the following report, noting that to date, this has been a relatively quiet Council meeting. The new Standards for Testing were approved and will be published in the upcoming months. APA is now revising the guidelines for Test Users Qualifications, and comments are being solicited until October, 1999. The

Division will review the documents and will provide comments. Chairs of the Science and Practice Advisory Committees were asked to provide feedback to the document to Dr. Chelune. Council also reviewed policy and procedures recommendations for restructuring of APA. APA also continues to work on gaining inclusion of psychology into the GME.

5. Newsletter: Dr. Morgan, Associate Newsletter Editor, reported that the Summer/Fall edition of the Newsletter 40 was the largest single edition to date, totaling 32 pages. He thanked members for contributing articles to the edition. Dr. Morgan encouraged submission of reports or articles by Committee Chairs and Council Representatives to keep the membership informed of Divisional activities. The deadline for submissions for the Winter/Spring edition is November 1, 1999.

6. Membership: Dr. Marcotte presented a written report prepared by Dr. Meneese who was unable to attend the meeting. Dr. Meneese presented the names of 208 applicants to the EC for membership in Division 40 (104 Members, 8 Associate Members, 173 Student Affiliates). The EC voted to accept all of the applicants. As of August, 1999, Division 40 voting membership (Fellows, members, associate members) totals 4220. The newly elected members will bring the Division 40 membership to 4332 Fellows, Members and Associate Members as of January, 2000.

7. Nominations: Dr. Bieliauskas reported the results of the recent elections for Division officers. Dr. Jason Brandt as elected to serve as President-Elect and Dr. Keith Yeates won the race for Member-at-Large.

8. Fellows: Dr. Berent reported the Committee received applications for Fellow from 5 members (4 men, 1 woman), with one applicant an established fellow in another APA Division. The names of four applicants were subsequently forwarded on to APA on behalf of the Division. APA Council will be voting on accepting these four members as Fellows on August 22, 1999. Dr. Berent will make an announcement at the Annual Business Meeting as to the outcome. Dr. Berent also reported that certificates have been made to honor Fellows within the Division. The EC also discussed the possibility of posting Fellow application materials on the webpage in the future and continued discussions about a mentoring program to attract minority and women division members' applications for fellowship. Applications for Fellowship are next due to Dr. Berent by December 15, 1999. Members can contact him directly to receive the appropriate application materials.

9. Program: Drs. Smith and Ricker reported that the Annual Convention program was proceeding well to date. A workshop was added after the original program was submitted. This year's Social Hour is being underwritten in part by three groups, the Psychological Corporation, Psychological Assessment Resources and American Guidance System. Dr. Ricker, Program Chair for 2000, encouraged anyone requiring space for meetings during the 2000 Annual Convention to let him know as soon as possible, as it is anticipated that space will be at a premium next year. Dr. Paula Shear will serve as next year's Program Committee Co-Chair.

10. Awards Committee: Dr. Baron reported that the 1999 Benton Lectureship will be delivered at the Convention by Dr. Otfried Spreen. The Fifth Annual Levitt Early Career Award recipient is Dr. Mark Bondi from the University of California at San Diego. The recipients of the two student awards administered through the American Psychological Foundation in honor of Henri Hécaen and Manfred Meier are Jill Gitten from the University of Florida and Sheryl L. Reminger from the University of Arizona.

11. Ethics: Dr. Becker reported that the Committee continues to discuss issues related to managed care as they impact the delivery of neuropsychological services. The Committee has also continued to monitor discussions pertaining to ethical issues on various list servers.

12. The EC was then visited by representatives of the APA Central Office, including Randy Phellps (Practice Directorate), Marilyn Richmond (Government Relations/Practice), Laurie Badnanes-Prather (Federal Regulatory Affairs Office) and Diane Pedulla (Federal Regulatory Affairs) to report on APA initiatives germane to neuropsychology. Dr. Phellps circulated a summary of APA Practice Directorate recent activities, including lobbying efforts in Congress for mental health parity, working with psychologists with the VA system to help assume greater roles as the VA reorganizes, and APA's public initiative directed at addressing the youth violence problem. The problems encountered by the Practice Directorate and Division 40 with the letter drafted for Sen. Breaux pertaining to the "incident to" issue were reviewed. Efforts undertaken by APA to address issues of reimbursement for neuropsychologists by HCFA were reviewed by Ms. Pedulla. Ms. Richmond then reported on the efforts of APA to have psychology included in the GME. APA's strategy is to seek inclusion of psychology into the GME under the "Nursing and Allied Health" category of providers, rather than under the physician category, although these "allied" programs have trainees comparable to psychology interns but not fellows. It was expressed that it was APA's intent to first gain acceptance for GME for pre-doctoral interns and to then fight for inclusions of fellows. Members of the EC voiced significant concerns about this strategy, questioning if there were other alternatives to explore. EC members suggested that APA should recognize that psychologists' level of training surpasses those of other

professions in the "Allied Health" category and is more akin to physician-level training. EC members voiced concerns that a success with this strategy could be used by the medical community to fight parity of doctoral psychologists. Dr. Phellps indicated that he will present the Division's concerns to APA and will keep us apprised of the situation.

13. Science Advisory: Dr. Bauer reported that Science Advisory Committee in collaboration with the Program Committee has organized an invited symposium at this year's Annual Convention, entitled, "Recent Advances in Functional MRI: Basic and Clinical Research". Two new students awards for excellence in research are also being inaugurated at the Convention. Dr. Bauer has received over 50 contacts from interested students since these awards were announced in the Spring mailing. Finally, Division 40 program highlights have been included in the APA Focus on Science brochure for the first time in many years. Dr. Bauer was thanked for his and the committee's efforts to improve the image of Division 40 within the science community of APA.

14. Education Advisory: Dr. Hamsher reported that the Education Advisory Committee has arranged a student Social Hour for Saturday to let students meet with other students and representatives from neuropsychology training programs. The committee also is planning a meeting in February 2000 in conjunction with INS for neuropsychology training organizations to meet and report on activities, with the goal of developing an action plan for education in neuropsychology. Dr. Hamsher also prepared a budget for this committee, which was accepted by the EC.

15. Practice Advisory: Dr. Eubanks reported that the Practice Advisory Committee is continuing its work towards recruiting state liaisons to act as contacts on Medicare and other regulatory issues, with the goal of having a neuropsychologist placed on Medicare Advisory Committees in as many states as possible. Dr. Eubanks continues to work with the Practice Directorate on federal Advocacy issues, and participates in round tables sponsored by the directorate.

16. Public Interest Advisory: Dr. Ricker reported for Dr. Wilson who was unable to attend the meeting. Dr. Wilson has been working with Dr. Chelune to help redefine the mission, objectives and goals of this committee. One possibility being discussed is for this committee to hold a day long meeting in conjunction with or immediately following INS in February, 2000.

17. Task Force on "Incident To" Issues: Dr. Bieliauskas reported that this Task Force, in conjunction with the APA Practice Directorate, is continuing to work with HCFA policy makers on the "incident to" issue. He reminded the EC that in August, 1998, a letter was sent by the APA Practice Directorate to Senator John Breaux (the Senator in charge of appropriations for HCFA) for review to send on to HCFA, asking if psychologists can document that services from technicians are

not bundled under their hospital coverage under Part A, they continue to be allowed to bill for technical services. While the letter was sent, reports from within are that the letter was never found in the Senator's office and as such no actions were undertaken. Dr. Bieliauskas commented, however, that on the local level, such as in the state of Michigan, several groups have been able to work out solutions. The laws are being interpreted differently in different regions of the country. The Task Force will continue its efforts, and will try to conclude its activities by the next EC meeting. Continued efforts on such issues will fall under the charge of the Professional Affairs Committee at that time.

18. CPT Code Task Force: Dr. Puente reported that Evaluation and Management Codes have been developed for use by psychologists. Work on the CPT-5 is continuing with a target date for publication in 2002.

19. Interdivisional Health Care Committee: Dr. Marcotte attended the IHC meeting today and reported that Dr. Fennell was unable to attend. The IHC developed CPT codes for the delivery of psychological/behavioral medicine services in health care settings. These codes were recently submitted to the AMA but were not accepted; there was, however, encouraging feedback to continue to revise the codes for resubmission. The APA Practice Directorate is assisting in this project. The IHC continues its advocacy efforts to place member Divisions' representatives on APA Committees.

20. Program Listings/Division 40 web page: Dr. Cripe reported that 164 training programs are currently available for review through links on the Division's web page. He will develop Standard of Practice Guidelines for the web page, with a target date for the next EC meeting.

21. Bylaws/Policy & Procedures Manual: Dr. Nemeth reported that the committee has completed its mandate to create a Policy and Procedures manual. The Committee was therefore disbanded. The task of keeping the Policy and Procedures manual current will be assumed by the Division's Secretary.

22. Division 40 Archivist: Dr. Nemeth reported on the initial success in developing the Division's archival collection at Louisiana State University. All records submitted to date are accessible by Internet through the LSU Digital Library (<http://diglib.lsu.edu/digitallibrary>). At present, there are 74 documents that can be accessed. By the end of this month, all 255 documents should be available. Dr. Nemeth encourages all former Divisional officers, committee chairs and members to consider making contributions to the collection. Materials should be mailed directly to her for review. Arrangements have also been made to ensure that the archives receives all future copies of the Division Newsletter.

23. ASHA/Division 40 Task Force: Dr. Fischer reported the Task Force met in February, 1999 and is continuing to work on several projects. Drafts of several reports are being circulated

for revision among committee members, including reports on "Referral and Collaborative Approaches" between neuropsychologists and speech/language pathologists, and "Interdisciplinary Approaches to Cognitive Rehabilitation". The committee is anticipated to meet during the APA Convention.

24. Minority Affairs: Dr. Dede submitted a listing of the committee's current members. The Committee is continuing to work on issues pertaining to recruitment and retention of minority students in clinical neuropsychology training programs. The Committee also co-sponsored an invited address presented at the conference by Dr. Jennifer Manley.

25. Committee on Empirically Supported Practice: Dr. Heaton reviewed the mandate of this committee to the EC and reported that the committee met for the first time this morning. The Committee will be developing guidelines to evaluate and document empirically supported practice in neuropsychology. The committee envisions requesting RFP's for reviews in this area with the goal of establishing some standards. Specific projects would then be funded, with the committee to review final documents, which in turn would be presented to the EC. The final step would be to publish the documents pertaining to practice standard in appropriate journals. The committee has discussed existing evaluative efforts by other disciplines. A budget was developed for this committee, and approved by the EC.

26. NAN/Division 40 Interorganizational Committee: This newly formed committee will be meeting for the first time tomorrow. The first project to be jointly undertaken by NAN and Division 40 will be the Professional Practice Survey. Division 40 members to this Committee will include the current President, Past President and President-Elect.

27. Division 40 Representative to the APA Committee on Gay, Lesbian and Bisexual Concerns (CGLBC): Dr. Mapou reported that future accreditation visits of training programs by the Committee on Accreditation (CoA) will review whether programs are adequately addressing psychological issues of gay, lesbian and bisexual individuals in their curriculums. As neuropsychology training programs will be visited by the CoA, it will be important for programs to review their curriculum to ensure that such topics are being adequately covered in the program. Guidelines for conducting psychotherapy with gay, lesbian and bisexual clients are also being presented to APA Council for review. Dr. Mapou also summarized CGLBC comments on the draft of the survey examining involvement of women, ethnic minorities, gay men, lesbians, bisexuals and individuals with disabilities in APA governance. He noted that the Division may wish to encourage individuals from these groups to become involve with Division governance activities.

28. Division 40 Representative to the APA Committee on

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**ANNUAL BUSINESS MEETING  
DIVISION 40 - DIVISION OF CLINICAL NEUROPSYCHOLOGY  
August 22, 1999  
Sheraton Boston Hotel, Boston, Massachusetts**

1. The Business Meeting of Division 40 was called to order by President Cecil Reynolds at 4:10pm. Division members were asked to review the minutes of the 1998 Business Meeting in the Fall 1998 Edition of the Newsletter 40.
2. Treasurer's Report: Dr. Wilfred Van Gorp reviewed the Division's financial status, and the approved budget for fiscal year 2000. He informed members that there will be no increase in Division 40 dues for 2000, and that the Division continues to be in excellent financial state. As of July 15, 1999, Division 40 had total assets of \$233,315.31 (\$193,213.95 cash on deposit at APA; \$40,101.36 in a Certificate of Deposit at Southern Pacific Thrift and Loan). Expenses for 1999 to date are well within the fiscal budget of \$62,315.00, although Dr. Van Gorp reminded the membership that most expenses are incurred at and following the Annual Convention. The budget for fiscal year 2000 will total \$77,375.00, with a new line item for the Committee on Empirically Supported Practice (\$9,000.00), and increased budgets for the office of the Secretary, Science Committee, Education Committee, and the Division Archivist.
3. Council Report: Dr. Reynolds next reported on behalf of the Division's Council Representatives who were not present. This session of Council has been quiet, with little controversy as in recent past meetings. The new Standards for Psychological and Educational Testing have been approved and will be published in December, 1999. Dr. Reynolds encouraged members to carefully read this document. There will be no dues increase for APA in 2000.
4. Dr. Reynolds next reported on behalf of Dr. Meneese, Chair of the Division's Membership Committee. The names of 208 applicants for membership in Division 40 have been approved (104 Members, 8 Associate Members, 173 Student Affiliates). As of August, 1999, Division 40 voting membership (Fellows, Members, Associate Members) totals 4220. The newly elected members will bring the Division 40 membership to 4332 Fellows, Members and Associate Members as of January, 2000. Division 40 is becoming one of the largest Divisions within APA.
5. Elections: Dr. Bieliauskas reported on the results of the recent Division 40 election. Dr. Jason Brandt was elected President-Elect for 1999-2000, and will serve as President of the Division in 2000-2001. Dr. Keith Yeates was elected to a three year term as Member-at-Large of the Executive Committee.
6. Fellows: Dr. Stan Berent, Chair of the Fellows Committee announced that the names of four Division 40 members put before the APA Council for Fellow status within APA were approved; the new Division 40 Fellows are: Drs. Paul Craig, Maureen Dennis, Michael Franzen and Bruno Giordani. Dr. Berent encouraged members to consider self-nomination for Fellow status. Members should contact him to receive the application materials, which will be due December 15, 1999. An announcement calling for members to apply for fellow status will also be included in the Division's Fall Mailing.
7. Program: Dr. Smith reported on this year's program. Of the 165 submissions received, 75% were accepted following review by three committee members. 5 symposium were accepted, and the program also consisted of one invited address, and 2 invited symposia. This year's Student Award Recipient, Dr. Nancy Fisher, was acknowledged and applauded for her outstanding submission. Dr. Smith also acknowledged the recipients of the two new student awards presented by the Science Advisory Committee, in addition to the three Blue Ribbon Award winning submissions. Dr. Smith thanked the members of this year's Program Committee for their fine efforts and hard work. He also thanked this year's Co-chair, Dr. Joseph Ricker, who will serve as Program Chair next year, assisted by Co-Chair, Dr. Paula Shear. Any members interested in working on this Committee are encouraged to send his/her vita to Dr. Ricker. Next year's program will feature Outcomes Research, but Dr. Ricker reminded the membership that all submissions are most welcomed. The deadline for submissions is earlier this year (Due date: November 15, 1999), and the APA Convention is also being held one week earlier in August, 2000. Dr. Reynolds thanked Dr. Smith on behalf of the Division for his excellent work during his term as Chair of this Committee, and presented him with a plaque of appreciation.
8. Awards: Dr. Ida Sue Baron announced that Dr. Mark Bondi was the recipient of this year's Levitt Award. Dr. Otfried Spreen was also recognized as this year's Benton Lectureship recipient. The recipients of two student scholarships, honoring Henri Hécaen and Manfred Meier administered through APF with Division 40 assisting in the selection of the recipients, were announced. This year's recipients are Jill Gitten from the University of Florida and Sheryl L. Reminger from the University of Arizona. Dr. Baron reminded the membership that the deadline for submissions for the next Levitt Early Career Award is January 5, 2000.
9. Newsletter: Dr. Joel Morgan, Associate Editor of Newsletter 40 announced that the deadline for submissions to the Fall/Winter edition is November 1, 1999.
10. Web Master: Dr. Lloyd Cripe, the Division 40 Web Master in charge of the Division's web site (www.div40.org), reminded members of the announcement subscription service available.

This free service monitors the web site and sends subscribers an announcement when a change has been made to the web site. This has allowed for the rapid dissemination of information to Division 40 members. He encouraged members who have not visited the web site to check it out! The web site also maintains links to other organizations of interest to neuropsychologists.

Respectfully Submitted,  
Ann C. Marcotte, Ph.D.  
Secretary, Division 40

11. Division 40 Archivist: Dr. Darlyne Nemeth, Division 40 Archivist, reviewed progress to date in establishing the Division's Archival Collection housed in the Louisiana State University Library System. The Division has begun to receive documents which have been reviewed and processed for storage. All materials are accessible to the public via the LSU digital library Internet service (<http://diglib.lsu.edu/digitallibrary>). Dr. Nemeth encourages all former Divisional officers, committee chairs and members to consider making contributions to the collection. Materials should be mailed directly to her for review.

12. Committee on Empirically Support Practice: Dr. Reynolds next announced to the membership the recent formation of this committee, to be chaired by Dr. Robert Heaton. Committee members include Drs. Reynolds, Erin Bigler, Jeffrey Barth, and Glenn Larrabee. The committee met for the first time during the convention to outline its goals. They will be developing guidelines for evaluating the science of practice in neuropsychology. They will prioritize topics to be examined and will then commission papers in the areas. Members with interests in this area were encouraged to contact Dr. Heaton.

13. In his Presidential remarks, Dr. Reynolds thanked on behalf of the Division two outgoing elected Executive Committee members, Past-President Dr. Linas Bieliauskas and Member-at-large, Dr. Richard Berg. Dr. Reynolds added that the Division had been very busy this year, responding to the needs of the membership on such topics as CPT codes, HCFA/Medicare reimbursement, and other practice related issues. He expressed thanks to the members of the membership for their efforts over his term as President, and extended special thanks to Dr. Ann Marcotte for her assistance during his tenure as President.

14. Dr. Reynolds then turned the podium over to Dr. Gordon Chelune, the 1999-2000 President of Division 40. Dr. Chelune offered thanks to Dr. Reynolds on behalf of the Division for his time and energy this past year. He expressed personal thanks to Dr. Reynolds for his openness, accessibility and commitment to a smooth transition of office. Dr. Chelune highlighted some of Dr. Reynolds accomplishments, including the formation of the NAN/Division 40 Interorganizational Committee and the Committee on Empirically Support Practice. Dr. Chelune then presented Dr. Reynolds with a plaque, and on behalf of the Division 40 membership, thanked him for his leadership this past year as Division President.

15. There being no other business, the meeting was adjourned at 4:52.

Newsletter 40 is the official publication of Division 40. The Editor is John DeLuca, and the Associate Editor is Joel Morgan.

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