# BOARD CERTIFICATION VIA ABPP/ABCN 101

Octavio A. Santos, MS, Co-Chair Relevance 2050 Student Pipeline Subcommittee

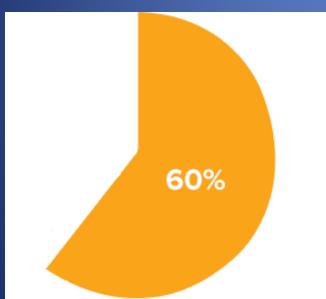
Clinical Psychology PhD Candidate University of Wisconsin-Milwaukee











Untestable population with our traditional toolkit

#### Goals

- Increase diverse people entering neuropsychology, AACN and its leadership
- Develop training strategies for students/trainees and early/mid-career neuropsychologists
- Support research and development of multilingual/multicultural assessment methods

#### Relevance 2050 Subcommittees

- Tools & Norms
- Peer Consultation Network
- Diversity Award for Posters
- Practicing Neuropsychologists Pipeline
- Grants
- Annual Diversity Initiative Workshop
- Student Pipeline, Co-Chairs Dr. Shawn Nelson Schmitt
   & Octavio Santos

For more information and to join, click <a href="here">here</a> and contact <a href="here">Dr. Anita Sim</a>, Chair of the Relevance 2050 Committee

### Outline

Board certification via ABPP/ABCN

Getting ready for board certification

Experiences going through the process

Resources and recommendations

Q&A



Linas Bieliauskas, PhD, ABPP-CN/CL



Incoroporated, 1981
American Board of Clinical
Neuropsychology



Linas A. Bieliauskas, Ph.D.

## Psychology Service VA Ann Arbor Healthcare System



Department of Psychiatry
Medical School
Department of Psychology
School of Literature, Science
and the Arts
The University of Michigan



Do I want the part? That depends. Am I a majestic relative of the horse or a lion's lunch?

#### Why Board Certification?

- Protection of the patient is paramount!
- During earlier periods, multiple routes to clinical practice were followed. Multiple claims to competence still prevail.
- Even with formal training, level of training cannot be guaranteed, either by program or by student.
- Self-designation is not acceptable. Certificates of training are no better.
- Certification by examination by peers is the only appropriate method of assuring competence.

## Psychology Boards Analagous to Medical Boards

- State licensure is not appropriate for specialty regulation.
  - problems with generic licensure abound, including:
    - understanding of specialty criteria difficult for legislators
    - multiple claims to competence without appropriate exam
    - sunsetting
- Board certification is voluntary and regulated by the field.
  - medical specialties also not regulated at state level
  - AMA directory lists "self-designated" specialists

## The less we resemble highlevel health care practitioners, the less we can be expected to be treated as equals.

- General doctoral level training
- Post doctoral specialization
- Specialty Board Certification!

Planning Group, Minneapolis, June, 1981 Manfred Meier

Linas Bieliauskas

**Charles Matthews** Louis Costa

Steven Mattis Edith Kaplan

Muriel Lezak Paul Satz

#### Original ABCN Board, 1983

**Arthur Benton** 

**Linas Bieliauskas** 

**Thomas Boll** 

**Nelson Butters** 

Louis Costa

**Leonard Diller** 

**Charles Golden (1984)** 

**Gerald Goldstein** 

**Harold Goodglass** 

**Edith Kaplan** 

Muriel Lezak, Treasurer

**Joseph Matarazzo** 

Charles Matthews, Sec.

Steven Mattis, V. Pres.

Manfred Meier, President

**Allan Mirsky** 

**Oscar Parsons** 

**Homer Reed** 

**Byron Rourke** 

**Paul Satz** 

**Aaron Smith** 

**Otfried Spreen** 

**Barbara Wilson** 

#### ABCN BOD 2016

- Heather Belanger (2013-2018)
- Douglas Bodin (2016-2021)
- Jacobus Donders (2014-2019)
- Laura A. Flashman, (2010-2017)
- Kathleen Fuchs (2016-2021)
- Marsha Gragert (2014-2019)
- Christopher Grote (2013-2018)
- Joseph Kulas (2013-2018)
- William MacAllister (2015-2020)

Nathaniel Nelson (2013-2018)

**Marc Norman (2016-2021)** 

**Nancy Nussbaum (2012-2017)** 

Robert Seegmiller (2015-2020)

Michael Schoenberg (2012-2017)

**Beth Slomine (2012-2017)** 

**Anthony Stringer (2008-2017)** 

Rodney Vanderploeg (2009-2019)

## Officers and Appointees 2015-2017

President

Vice President

Secretary

Treasurer

ABPP Representative

Executive Director

Exam Committee Chair

Local Arrangements Chair

**Anthony Stringer** 

Nancy Nussbaum

Laura Flashman

Joseph Kulas

Brenda Spiegler

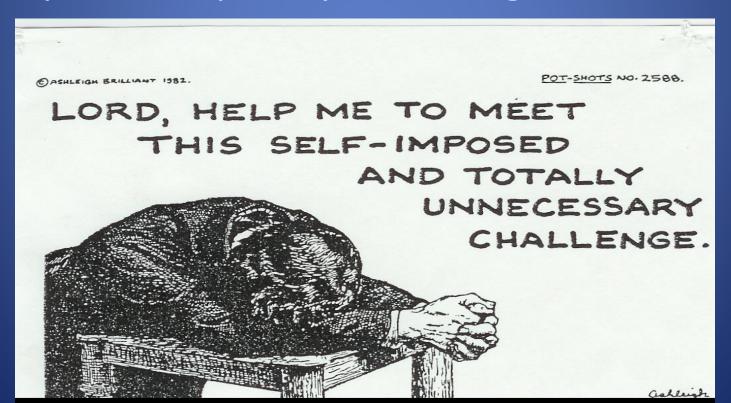
Linas Bieliauskas

Bernice Marcopulos

Neil Pliskin

#### Myth

- Nobody cares about ABCN/ABPP and very few people have the diploma.
- Why should I put myself through this?



#### Reality

As of April, 2016, there are 1077 board certified Clinical Neuropsychologists, from 47 states, the District of Columbia, and 4 provinces. Since its inception, ABCN has awarded board certification to 1,144 individuals. In 2015, 102 candidates took the written exam and 94 took the oral exam.

The written exam is now computer-based, administered four times per year. There are two oral exams scheduled for 2016.

#### Process

#### The Examination Process Consists of:

- Submission and review of credentials.
- Written examination given four times per year, through PSI Examination Centers, at station in your area!
- Practice sample review and acceptance.
- Oral examination in Chicago.

#### Costs

- \$125 Application Fee (\$25 early application fee for students)
- \$300 Written Examination Fee (\$460 3rd & 4<sup>th</sup> windows in 2016; \$525 in 2017; \$590 in 2018) + \$65 seat fee
- \$250 Practice Sample Fee
- \$450 Oral Examination Fee
- Total = \$1,125; \$1,285 at end of 2016
- ------
- For comparison, the fee for the written exam in Neurology is \$1,685.

## Myth

If I don't pass my ABCN/ABPP examination, my career is over and I can never take it again

### Reality

ABCN procedures provide for almost infinite retakes, always without prejudice after not passing once at any step, and mandating a three year waiting period after not passing twice. Not passing a third time simply means that one has to start over again. One never has the same reviewers or same examiners twice, and the reviewers or examiners do not know whether or not the candidate has taken the exam before.

## Myth

Becoming board certified doesn't make any difference to my practice, so why should I go through the grief?

#### Reality

The following benefits are associated with getting the diplomate:

- External credentialling by peers for practice competency, recognized in venues which require it (legal, managed care, hiring, etc.) & clearest evidence of competency in Clinical Neuropsychology.
- Equivalency to medical boards (important in medical settings).
- Important as training credential for accreditation.
- Listing in APA Register.

#### Further Benefits

- Pay differential in the armed services.
- Step pay differential in the VA.
- Reciprocity of license in most states to some degree.
- Requirement for Certificate of Professional Qualifications in Psychology as part of ASPPB; accepted in 34 jurisdictions and near approval in 11 more; must achieve state passing score on EPPP or qualify for waiver by having ABPP
- Personal validation of competency.

#### The Houston Conference

 specifies that education for specialty practice should continue through residency training, exit criteria for which include: "Eligibility for board certification in clinical neuropsychology by the American Board of Professional Psychology."

## Myth

ABCN is a board whose examination is mainly "academic" or suited for "academics."

#### Reality

The notion that ABCN is "academic" is an often-circulated mistruth. It is a lie and intended to mislead. The majority of ABCN board certified neuropsychologists are in practice which is not affiliated with any academic institution. ABCN/ABPP has always provided an examination of competency to practice. Academics don't need practice credentials.

## Myth

 ABCN is not friendly and exclusionary toward Child and Pediatric Neuropsychologists.

### Reality

 ABCN has always included child and pediatric neuropsychologists among its numbers and mandates that adult and pediatric neuropsychologists constitute their BOD.

 Most of the most prominent child/pediatric neuropsychologists in North America are boarded through ABCN.

## Child Subspecialty Certification added 2014

Need to be board certified through ABCN

Added application form

Added written exam

Added practice sample review

## Reality Continued

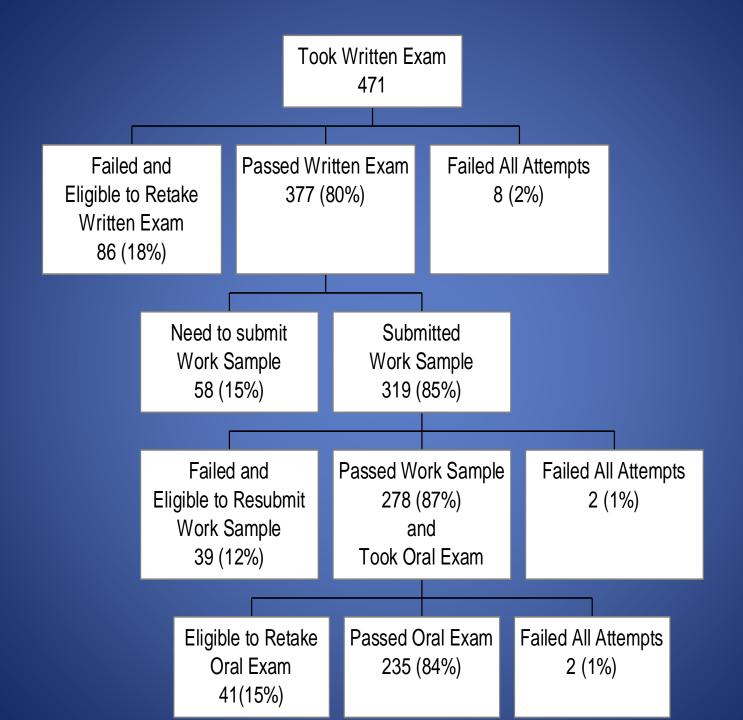
- The ABCN written exam already consists of adult and child/pediatric questions.
- When so specified, practice samples are reviewed by child/pediatric specialists.
- When so requested, oral examiners include child/pediatric specialists for the practice sample and fact finding portions, within the limits of conflicts-of-interest
- The fact finding portion of the oral exams gives the choice of an adult or child/pediatric case.

#### Recent Pass Rates

| Year | Written Exam | Oral Exam |
|------|--------------|-----------|
| 2008 | 69%          | 79%       |
| 2009 | 63%          | 89%       |
| 2010 | 66%          | 83%       |
| 2011 | 79%          | 85%       |
| 2012 | 67%          | 80%       |
| 2013 | 61%          | 75%       |
| 2014 | 60%          | 80%       |
| 2015 | 63%          | 73%       |

#### Pass Rates Overall for Ten Year Period

- From 1993 to 2003, 471 applied for the exam
- Total failed all writtens: 1.7%
- Total failed all Practice samples: .42%
- Total failed all orals: .42%
- Total who failed process at some point: 2.55%
- Total who dropped out /not finished yet: 27.39%
- Total Passed + Total Dropped out/not finished yet: 77.29%



## Myth

ABCN/ABPP is the same as any other board, so why go through the bother?



"OOOOOOoooo ... COOL!"

## Reality

Boards can be established at anyone's will in a free country. In medicine, there are over 100 boards, but there are only 22 recognized boards associated with the **American Board of Medical Specialties** (ABMS), the oversight board. Similarly, there are multiple boards in psychology, but only 15 are associated with the **American Board of Professional** Psychology (ABPP) as the oversight board since 1947. ABCN is the affiliated board of ABPP which is responsible for the examination in Clinical Neuropsychology.

## American Board of Medical Specialties (ABMS)

| Am | erican Board of:        | Approved |
|----|-------------------------|----------|
| •  | Allergy & Immunology    | 1972     |
| •  | Anesthesiology          | 1941     |
| •  | Colon & Rectal Surgery  | 1949     |
| •  | Dermatology             | 1931     |
| •  | Emergency Medicine      | 1979     |
| •  | Family Practice         | 1969     |
| •  | Internal Medicine       | 1936     |
| •  | Neurological Surgery    | 1940     |
| •  | Nuclear Medicine        | 1971     |
| •  | Obstetrics & Gynecology | 1930     |
| •  | Opthamology             | 1917     |
| •  | Orthopaedic Surgery     | 1935     |

## ABMS (continued)

| • | Otolaryngology                     | 1924 |
|---|------------------------------------|------|
| • | Pathology                          | 1936 |
| • | Pediatrics                         | 1933 |
| • | Physical Medicine & Rehabilitation | 1947 |
| • | Plastic Surgery                    | 1941 |
| • | Preventive Medicine                | 1949 |
| • | Psychiatry & Neurology             | 1935 |
| • | Radiology                          | 1935 |
| • | Surgery                            | 1937 |
| • | Thoracic Surgery                   | 1970 |
| • | Urology                            | 1935 |

## American Board of Professional Psychology (ABPP)

- Established in 1947, replacing the APA Committee considering a credentialing body for psychologists.
- APA recognized that the same body could not carry out both membership advocacy and professional certification functions.
- APA gave \$2,000 loan to establish ABPP as a legally independent entity.
- Currently, there are 15 member boards, ABCN being one of them.

# American Boards of Professional Psychology (ABPP)

| American Board of:   | Approved: |
|--|-----------|
| <ul> <li>Clinical Child and Adolescent Psychology</li> </ul> | 2003      |
| Clinical Health Psychology                                   | 1991      |
| Clinical Neuropsychology                                     | 1983      |
| Clinical Psychology  | 1947      |
| <ul> <li>Cognitive and Behavioral Psychology</li> </ul>      | 1992      |
| <ul> <li>Counseling Psychology</li> </ul>                    | 1947      |
| <ul> <li>Couple and Family Psychology</li> </ul>             | 1990      |
| Forensic Psychology  | 1984      |

## American Boards of Professional Psychology (ABPP)

| • | Geropsychology                      | 2013 |
|---|-------------------------------------|------|
| • | Group Psychology                    | 1999 |
| • | Organizational and Business         |      |
| • | Consulting Psychology               | 1947 |
| • | Police and Public Safety Psychology | 2011 |
| • | Psychoanalysis                      | 1996 |
| • | Rehabilitation Psychology           | 1995 |
| • | School Psychology                   | 1968 |

## Top 10 Reasons to Pursue ABPP/ABCN

- Adapted with permission from "A Step-by-Step Guide to ABPP/ABCN Certification in Clinical Neuropsychology" by Armstrong, Beebe, Hilsabeck, & Kirkwood (in press).
- Sweet, J. J., Nelson, N. W., & Moberg, P. J. (2006). The TCN/AACN 2005 "salary survey": professional practices, beliefs, and incomes of U.S. neuropsychologists. *The Clinical Neuropsychologist*, 20, 325-364.

## Top 10 Reasons

- Higher income
  - Neuropsychologists with ABPP/ABCN earn, on average.
  - VA, Armed Services, and some medical institutions offer salary bonus benefits
- Job satisfaction
  - Neuropsychologists with ABPP/ABCN are more satisfied1
- Job security
  - Some jobs require board certification or its pursuit as a condition of employment (e.g., some medical school departments, accredited neuropsychology postdoctoral training programs)

## Top 10 Reasons (continued)

- Credibility
  - Comparable to medical boards
  - Preferred in legal settings
  - Preferred in medical settings
  - Attracts trainees
- License and practice mobility
  - Enables licensing reciprocity in many states
  - Facilitates licensing in some states that do not allow reciprocity
- Streamlined credentialing
  - Reduces paperwork required by some state licensing boards
  - Meets strictest standards of insurance panels

## Top 10 Reasons (continued)

- Increased knowledge base
  - Preparation ensures breadth and depth of neuropsychological knowledge
  - Receipt of APA-approved CE credit upon completion of the process
- Reduced public confusion
  - Clarifies to lay person that you have received substantial training and have been deemed competent by peers
- Personal validation and satisfaction
  - Confirmation of your clinical neuropsychological skill set
  - Role model to colleagues and trainees
- Quality assurance
  - Supports widespread use of training and practice standards



Ever been to board exams before?

## Administrative Structure for Application and Examination

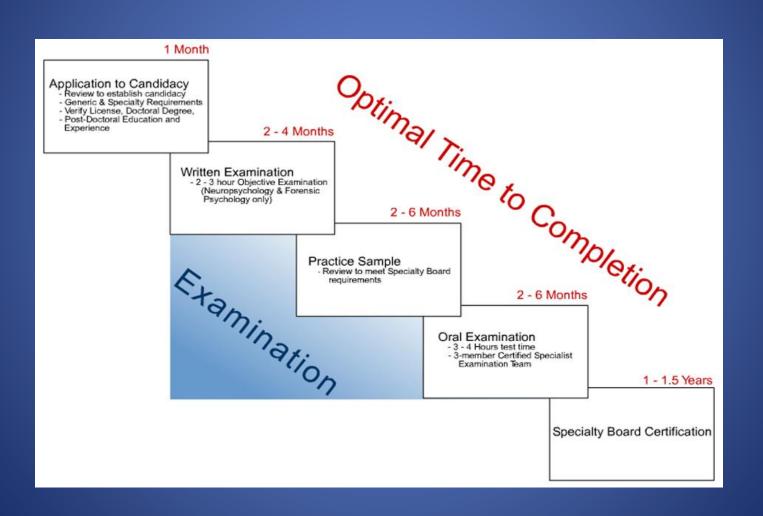
Application and Credentials Review

Written Examination

Work Sample Evaluation

Oral Examination

## How Long Does it Take?



## But.....

- Don't procrastinate!
- This can be done in a surprisingly quick way.....
- Just follow the steps!

The American Board of Professional Psychology's (ABPP) certification in Clinical Neuropsychology is a two-phase process. Each phase includes two steps.

The first phase of this process focuses on assuring that the candidate has received appropriate education, training and supervised clinical experiences and evaluating a candidate's neuropsychological knowledge. This is accomplished in two steps: (1) Credential Review and (2) the ABCN Written Examination in Clinical Neuropsychology.

The second phase of the certification process focuses on assuring clinical competence. This is also accomplished in two steps: (1) Practice Sample submission and review and (2) the ABCN Oral Examination in Clinical Neuropsychology.

#### Phase I

1. Candidate applies to ABPP for board certification in Clinical Neuropsychology, with a \$125 application fee. ABPP checks the applicant's transcripts, review credentials, and generally check the applicant's background as presented in the application.

2.

- A. If not approved, the candidate is so notified with a description of areas of weakness or non-acceptability of credentials along with recommendations for strengthening the application, if any. Process ends here.
- B. If the candidate wishes to reapply, he/she must demonstrate that their application has been improved and the application fee of \$125 must be paid again.
- C. If approved, the application is forwarded to ABCN credentials committee which checks for compliance with ABCN-specific standards relating to education, training and experience.

3.

- A. If the ABCN committee does not approve the application, it is returned to ABPP with the recommendation not to approve along with a description of weakness or non-acceptability of credentials as well as recommendations for strengthening application, if any. Process ends here.
- B. If the candidate wishes to reapply, he/she must demonstrate that their application has been improved, the application fee of \$125 must be paid again, and credentials review proceeds from the beginning.
- C. If the ABCN committee approves application, it is returned to ABPP with a recommendation to approve.
- D. ABPP notifies the candidate of the results of the credential review procedure. Applicants whose credentials are approved become "candidates" for ABPP certification in Clinical Neuropsychology. The ABPP certification process must be completed within seven years from the date on which the candidate is notified that his/her credentials have been approved. The date on the applicant's credential review decision letter defines the start for this seven-year period.

ABPP instructs the candidate that the next step is to take the written examination which will be given through PSI, four times per year. The candidate is instructed to contact ABCN directly to arrange for taking the next written examination and to forward a fee of \$300 to ABPP. ABPP forwards a copy of the candidate's file to ABCN for further processing. A candidate may take this Written Exam whenever it is offered after being notified of the credential review decision. The Written Exam may be taken no more than three times in the seven-year time period. Candidates who fail the Written Exam three times, or who fail to pass the Written Exam in the seven-year time period, are not permitted to move forward in the certification process and they do not receive ABPP certification.

5.

- A. Candidates who do not pass the written examination on their first attempt are informed that they may take the examination again, within the seven year period without prejudice, after waiting for at least six months and resubmitting the then current examination fee. Process ends here unless the candidate chooses to reapply for the written examination.
- B. Candidates who do not pass the written examination on their second attempt are informed that they may take the examination again, after waiting at least six months, within the seven year period without prejudice, upon resubmission of the then current examination fee. Process ends here unless the candidate chooses to reapply for the written examination.
- C. Candidates who do not pass the written examination on their third attempt are not eligible to take it another time and the process ends here. In this instance a candidate would need to reinitiate the entire application process with appropriate fees if they wish to pursue candidacy for the diploma.
- D. ABPP informs all candidates who pass the written exam of their results. ABPP also then directs each candidate to submit a Practice Sample to ABCN for review and a \$250 Practice sample review fee to ABPP.

#### Phase II

In Phase 2, step 1, candidates submit a Practice Sample. Each Practice sample includes two cases that the candidate has completed without being supervised. This Practice Sample is reviewed for its acceptability for use during a candidate's oral examination. Every Practice Sample is reviewed by three ABPP-certified clinical neuropsychologists. Each reviewer rates the Practice Sample as either "acceptable" or "not acceptable" for use at the orals. At least two reviewers must rate the Practice Sample as "acceptable" before the candidate can be scheduled for the oral examination. Practice Samples that are rated as "not acceptable" by at least two reviewers are forwarded for automatic appeal. Non-accepted Practice Samples are then returned to the candidate with comments about the Practice Sample's strengths and weaknesses. The candidate repeats the Practice Sample submission and review process (using new case material with every submission) until a Practice sample is rated as "acceptable" for use at the oral examination.

1.

- A. If a candidate's first Practice sample is not accepted, the candidate is so notified along with a description of its weaknesses along with recommendations for improvement, if any. The candidate may submit a new Practice sample without prejudice, but with a new Practice sample review fee to ABPP. If a candidate does not submit a new Practice sample, the process ends here.
- B. If a candidate's Practice sample is not accepted for a second time, the candidate is so notified along with a description of its weaknesses along with recommendations for improvement, if any. The candidate may submit a new Practice sample without prejudice again, but with the Practice sample review fee to ABPP. If a candidate does not submit a new Practice sample, the process ends here.
- C. The above procedures repeat themselves until a candidate's Practice sample is rated as acceptable for use at the oral exam. Whenever a Practice sample is not accepted, candidate may continue to submit a new Practice sample (always using new case material) until such time as a Practice sample is accepted or the seven-year period of examination expires. The current Practice sample review fee must be submitted to ABPP with every other Practice sample submission cycle.
- D. When a Practice sample is accepted for use at the oral exam, the candidate and ABPP are so informed by ABCN. The candidate is notified that he/she is eligible to sit for the next oral examination where there is available space. Candidates will also be notified to submit the \$450 oral examination fee to ABPP.

- 2. After a candidate's Practice Sample is "accepted," the candidate may take the Oral Exam when it is next offered and there is available space.
- A. Candidates who pass their Oral Exam are awarded ABPP certification in Clinical Neuropsychology and become American Academy of Clinical Neuropsychology (AACN) members. The names of candidates who pass the oral examination are presented to ABPP along with the recommendation that these candidates be awarded ABPP certification in Clinical Neuropsychology. If approved, ABPP then so informs the candidate and arranges for the award of the diploma in Clinical Neuropsychology.
- B. Candidates who fail their Oral Exam may re-take the exam after having a new Practice Sample reviewed and "accepted," via the above-described procedures, provided that the seven-year limit has not expired. A candidate may take the Oral Exam no more than three times in the seven-year time period of their candidacy.

#### **General Comments**

It is the candidate's responsibility to accomplish all tasks required for ABPP certification within the seven-year time limit. The applicant or candidate must pay all fees required during the certification process, including those required if steps in the process are repeated. There are current considerations to reduce the time limits, to 12 months at any stage.

Candidates who fail to obtain ABPP certification through the procedures specified here may re-initiate the process without prejudice by re-submitting their updated credentials for review. An applicant should understand that whenever a new application is initiated all previous actions will be regarded as if having never happened and no comparisons will be made between current and past procedures or actions. All candidates will be required to engage in the examination procedures that are current at the time of their re-application and which will incorporate any changes that have taken place since any prior application.

Exceptions to these procedures may only be granted by a majority vote of the ABCN Board of Directors.

## ABPP General Criteria

- Eligibility for Specialty Certification
- To attain board certification in a specialty, an applicant must meet the general and the specialty eligibility requirements which include:
- A doctoral degree from a program in professional psychology which at the time the degree was granted was accredited by the APA, CPA, or was listed in the publication *Doctoral Psychology Programs Meeting Designation Criteria*.

## **ABPP Criteria Continued**

- Licensure or Certification at the independent practice level as a psychologist in the State, Province, or Territory in which the psychologist practices.
- Note: Limited exceptions exist for prior to 1983 doctoral preparation, degrees granted outside the U.S. or Canada, formal retraining, substantial equivalents to accreditation requirements, and licensure in jurisdiction of practice for some Federal employees. Exception criteria and procedures are available from Central Office.
- Specialty preparation for practice characteristic of the specialty, including appropriate doctoral education as a foundation for the specialty and such post-doctoral preparation as necessary to meet the standards of the specialty.

## **ABCN Specific Criteria**

- Areas of training and experience:
  - Basic Neurosciences

-Neuropathology

Clinical Neurology

- -Neuroanatomy
- Psychological Assessment
- Clinical Neuropsychological Assessment
- Psychological Intervention
- Psychopathology

- September 3-7, 1997
- Neuropsychology approved as a specialty by APA in 1996
- Need to establish a model of training
- 40 delegates, 6 planning committee members, 3-4 observers chosen from applicants from all constituencies in Clinical Neuropsychology
- Policy statement adopted by consensus
- Policy statement endorsed by all major neuropsychology organizations

- Anyone graduating in 2005 or later must meet Houston Conference Guidelines
- Doctoral level graduate training, internship, and Includes 2 year accredited postdoctoral fellowship (adjustment being reviewed for Canadian citizens).
- Cannot be established on the basis of continuing education alone
- Training in multiple domains
  - Generic Psychology
  - Generic Clinical
  - Foundations for brain-behavior relationships
  - Foundations for practice of clinical neuropsychology

## Houston Conference Guideline Modifications

- Houston Guidelines require that the residency be the equivalent of 2 years and completed on at-least a half-time basis. ABCN will accept minor deviations from these requirements that may arise based on medical, personal or professional factors. Under these circumstance the candidate must provide written documentation from the residency director that the candidate:
- 1) left the residency in good standing,
- 2) met all requirements of the residency,
- 3) obtained the requisite skills and knowledge base described by the Houston Guidelines.
- •ABCN will not require that the faculty of the 2-year residency include a board certified neuropsychologist (as stipulated in the Houston Guidelines). However, under these circumstances the candidate may be asked to provide a curriculum vitae for their primary neuropsychology supervisors.

## Canadian Modifications

- The same didactic, academic and clinical training experiences at the Doctoral and Internship level will be required of Canadian and US applicants, including the same requirements for Knowledge Base and Skills.
- At the level of Residency Education and Training in Clinical Neuropsychology, Canadian applicants are required to have two years of full-time post-doctoral practice supervised by a practicing clinical neuropsychologist. Supervised practice should allow for an affiliation with or access to an academic medical center where the trainee can access patient rounds, didactic sessions and other training opportunities (e.g., medical rounds, imaging training, etc). Interactions with other residents in medical specialties and allied professions is encouraged but not required. Supervised practice should allow the applicant exposure to and experience with a broad range of medical/neurological disorders or conditions and train them in the provision of a variety of clinical neuropsychology services (assessment, history taking, interview, feedback, report-writing, consultation, program planning, and intervention). The exit criteria for the residency are the same, namely:

- Advanced skill in the neuropsychological evaluation, treatment and consultation to patients and professionals sufficient to practice on an independent basis;
- Advanced understanding of brain-behavior relationships;
- Scholarly activity, e.g., submission of a study or literature review for publication, presentation, submission of a grant proposal or outcome assessment.
- A formal evaluation of competency in the exit criteria 1 through 3 shall occur in the residency program.
- Eligibility for state or provincial licensure or certification for the independent practice of psychology.
- Eligibility for board certification in clinical neuropsychology by the American Board of Professional Psychology.
- In summary, the only deviations from the Houston Guidelines is the requirement of at least one board-certified clinical neuropsychologist on the program's faculty (this is not yet strictly applied to the US residencies) and more flexibility for those who seek out comparable supervisory and training experiences where formal residency programs do not yet exist.

 A clinical neuropsychologist is a professional psychologist trained in the science of brainbehavior relationships. The clinical 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.

- Who should have specialty training?
  - Persons who engage in specialty practice or supervise specialty practice.
  - Persons who call themselves "Clinical Neuropsychologists" or otherwise designate themselves as engaging in specialty practice.
  - Psychologists who engage in educating or supervising trainees in specialty practice.

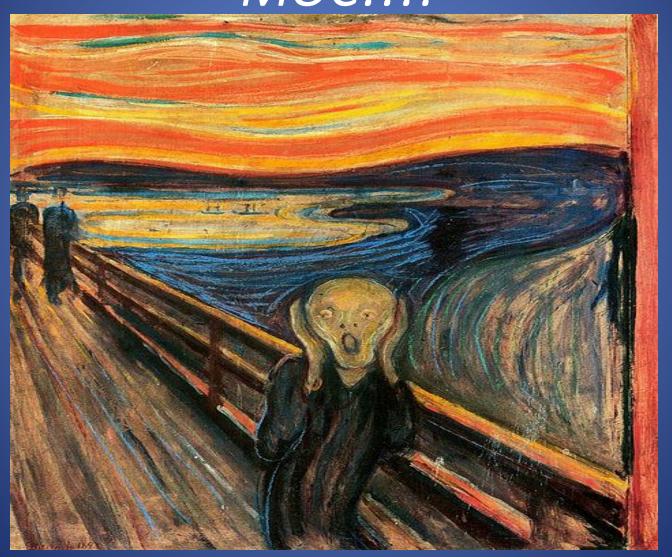
- Skills
  - Assessment
  - Treatment & Intervention
  - Consultation
  - Determination/Clarification of referral issues
  - Research
  - Teaching and supervision

Different knowledge base and skills can be established at different levels

 The conference established nothing new. It codified the existing state of education and training in Clinical Neuropsychology.

A profession without a model is not a profession.

# MOC!!!!



### Maintenance of Certification

Specialists must complete MOC every ten years following initial board certification. MOC materials must be submitted nine years following certification (or last MOC renewal) and must document the professional activities that supported maintenance of specialty competencies during the two years prior to the submission (i.e., years 7 & 8 post-certification or last MOC renewal). Specialists who were board certified prior to January 1, 2015, who opt in to MOC, may submit materials beginning in 2016, according to a timetable to be established by the ABCN Board of Directors.

#### What does *MOC* Entail?

 The MOC process is comprised of two parts. Specialists will complete: (1) an electronic form, known as the ABCN Specialty Continuing Professional Development (SCPD) Grid, to document professional activities and calculate "credits" (Discussed earlier in FAQ #2); and (2) a minimum of four brief questions related to clinical practice and setting, a recent ethical/diversity issue encountered, and the means by which clinical efficacy is evaluated.

#### Written Examination

- Prepared in conjunction with Alpine Testing Solutions
- Updated every 2-3 years by 30%
- Items rated for appropriateness as well as accuracy
- 125 multiple-choice items, covering 2 rubrics (25 are pilot items)
- No longer given at each of the four major neuropsychological meetings annually, INS, AACN, APA Division 40, and NAN.

#### Upcoming Written Exams given through PSI Examination Centers

- Four times per year
- At a PSI Exam Center close to home
- In 2016, two week periods beginning:

February 27<sup>th</sup> thru March 13<sup>th</sup>

(Deadline to register: *January 22<sup>nd,</sup>*, 2016)

May 28<sup>th</sup> thru June 12<sup>th</sup>

(Deadline to register: April 22, 2016)

August 27<sup>th</sup> thru September 11<sup>th</sup>

(Deadline to register: July 22, 2016)

November 26<sup>th</sup> thru December 11<sup>th</sup>

(Deadline to register: September 30th)

# Results 3-4 weeks after close of testing window.

# Recommended Readings (updated editions) for Written Exam

- Lezak, Howieson, Bigler, & Tranel: Neuropsychological Assessment (4<sup>th</sup> ed.). 2012, Oxford.
- Woolsey & Hanaway: 2007, The Brain Atlas. Fitzgerald Science Press.
- Kandel, Schwartz, Jessel: Principles of Neural Science (5<sup>th</sup> ed.). 2012,
   Appleton & Lange.
- Adams & Victor: Principles of Neurology (10<sup>th</sup> ed.). 20014: McGraw-Hill.
- Kolb & Wishaw: Fundamentals of Human Neuropsychology. 2008, Worth.
- Heilman & Valenstein: Clinical Neuropsychology (5<sup>th</sup> ed.). 2011, Oxford.

# Recommended Readings

- J. Morgan & J. Ricker (Eds.), *Textbook of clinical neuropsychology,* Taylor & Francis, 2008.
- J. E. Morgan, I. S. Baron, & J. H. Ricker (Eds.), *Casebook of clinical neuropsychology*. 2010 New York: Oxford University Press.
- Bush, S. Ethical decision making in clinical neuropsychology.
   2007. Oxford.
- Published practice guidelines (e.g., dementia, MCI, etc;)
   AACN, AAN

# Readings (continued)

The Following have Questions at end of each chapter:

 Weiner, Goetz, Shin & Lewis: Neurology for the Non-Neurologist. Lippincott, 2010.

 Vanderah & Gould: Nolte's The Human Brain: An Introduction to Its Functional Neuroanatomy. Mosby, 2015.

# Two Rubrics for Questions from Houston Conference

- Scientific Foundations for the Practice of Neuropsychology
  - Neuroanatomy throughout lifespan
  - Neurological disorders
  - Non-neurologic condiitioins
  - Research design and analysis
  - Neuroimaging and neurodiagnostic techniques
  - Neurophysiology and neurochemistry of behavior
  - Normal brain-behavior over the lifespan
  - History of theory, research, and practice in neuropsychology

#### Second Rubric

- Clinical Foundations for the practice of Neuropsychology
  - Interview and assessment techniques
  - Psychometrics
  - Interventions
  - Practical Implications
  - Impact of personality and psychopathology
  - Professional issues and ethics
  - Individual differences and diversity

#### **General Domains**

- Neuropsychological Assessment
  - Psychometrics & diagnostic (decision) theory
  - Interpretation of test results
  - Effects of normal aging and other demographic factors on test performance
  - Psychometric features of cerebral disease
  - Comparison of tests used in neuropsychological assessment and research

- Clinical Neuropsychology
  - Neurobehavioral characteristics of cerebral disease
  - Neurobehavioral syndromes
  - History of Clinical Neuropsychology
  - Theory of brain organization and functions
  - Theory of neuropsychological signs and symptoms of cerebral disease
- Basic and Clinical Neurosciences
  - History of neuroscience
    - Persons
    - Thoughts and concepts
  - Neuroanatomy (normal surface anatomy to types of cells, vascular system
  - Neurophysiology (cell or tissue functioning, role of blood cells)
  - Neuropathology (types of abnormal cells, classification of tumors, histological characteristics of cerebral disease, vascular abnormalities)
  - Neuropharmacology & neurotransmitters in neurologic disease

#### Behavioral (Clinical) Neurology

- Neurological examination
- Neurodiagnostic testing
  - EEG
  - Evoked Potentials
  - Magnetoencephalograph
  - Transcranial Doppler
- Brain Imaging and Related Procedures
  - CAT
  - MRI
  - FMRI
  - PET
  - SPECT
  - Cerebral Blood Flow
  - Skull X-Rays
  - Angiography

- Neurologic signs and symptoms of disease (e.g., Glascow Coma Scale, Confusional States, Parkinson Disease, Huntington Disease, Persistent Vegetative State, etc.
- Etiology, risk factors, course and prognosis of neurologic disease
- Treatment of neurologic disease (including untoward effects)

#### General Clinical Psychology

- Psychological and psychiatric examinations
- Psychological disorders from DSM
  - Psychological Assessment
  - Psychological testing
  - Psychological signs and symptoms of DSM psychiatric disorders
  - Physical signs and symptoms of DSM psychiatric disorders
  - Etiology, risk factors, course, and prognosis of psychiatric disorders
  - Theories of cognitive psychology & its terminology
  - Psychopharmacology in the treatment of psychiatric disorders (including therapeutic & side effects)

## Hints for the Written Examination

- Studying is important. Map out a study strategy and stick to it.
- Ask friends and colleagues who have gone through the process about books or programs which they found particularly useful.
- Think about forming study groups which cover topics and then members quiz each other.

# Practice Sample Submission

- A Practice sample consists of two cases
- The cases must be sufficiently different to demonstrate broad knowledge
- Original report, summary sheet, copy of raw test protocols

Note: Supplementary materials NO LONGER REQUIRED!

# Hints for Practice Sample

- Make sure cases are sufficiently diverse.
- Make sure cases are typical for your practice; do not labor to introduce exotic cases.
- Do not write overly long reports.
- Make sure all identifying information is removed.
- Make sure summary sheets are clear.
- Make sure all test protocols are correctly scored.
- Do not violate copyrights.
- Start looking for Practice samples now!
- Have ABCN/ABPP colleagues critique cases.

### **Oral Examinations**

Once a candidate is notified that their Practice samples have been accepted (not passed) for oral examination, they are asked to prepare to take the next available oral examination. Examinations are currently held at the University of Illinois at Chicago Medical Center, two times per year. For 2016, the exam is offered in March and November. With four examination teams, 48 candidates can be accommodated at each exam.

The examination committee of ABCN selects the examiners from a fixed cadre of examiners, selected for high quality of past exam administrations or high probability of effective examination based on training experience. The examiners represent the diversity of board certified clinical neuropsychologists, including gender, region, child/adult emphasis, and seniority.

When Practice samples are accepted, the candidate is asked to confirm their attendance at the examination. Suggestions are given to the candidates for reasonable accomodations close to the exam site and some arrangement is usually made to secure reduced rates (though this is not always possible).

Chicago has been chosen to be the standard site for oral examinations because of:

- Central location for travel
- Reasonable cost
- Opportunity for collateral activities
- Examination facilities in an appropriately respectful setting for the profession
- Standardization of examination procedures

## Hints for all parts of oral exam:

- Time management is crucial
  - 45-55 minutes for each part of exam
  - Time allowed to get organized
  - Do not ask irrelevant questions
- Pencil and Paper allowed
  - Notes may be taken during exam, including at the beginning to help get organized, if necessary
  - No notes may be taken from the exam
  - No electronics
- Remember it is less what you know and more how you think.
- Stay Relaxed! Avoid being argumentative or defensive.
- Remember all examiners are hopeful that you will pass the examination.

# Oral Exam Hints (continued)

- Ask ABCN/ABPP colleagues what strategies they used to get through the process.
  - Study Habits
  - Organization During the Exam
  - Anxiety
- Find colleagues who will give you pep talks!

### ETHICS and PROFESSIONAL ISSUES

- Background questioned as to professional development to see why you think and practice the way you do
- As with all parts of the exam, priority is that decisions made and conclusions reached are Rational, Logical, Reasonable, and Defensible
- Educational background, training background, continuing education, ongoing professional activities

# American Board of Clinical Neuropsychology, Inc. Outline for Ethics & Social Responsibility Examination

• Candidate Examiner

Date

- 1. Educational background
  - a. General
  - b. Neuropsychology
- 2. Clinical training internship
  - a. General
  - b. Neuropsychology
- 3. Postdoctoral clinical education and training
  - a. General
  - b. Neuropsychology
- 4. Other background in Neuropsychology?
- 5. Research?
- 6. Publications?
- 7. Nature of practice.
- 8. Continuing Education.

- Involvement in local, state, regional, national, international organizations
- a. Attendance of meetings
- b. Presentations at meetings
- c. Professional organizational Practice
- 10. Teaching and/or clinical supervision of students
- 11. Have they ever been the subject of any inquiry concerning clinical or ethical matters?
- 12. Ever denied a requested privilege?
- 13. Ever have a granted privilege rescinded?
- 14. Ever encounter an ethical issue (e.g., involving others' behavior)?
- 15. What educational activities have you engaged in that were related to ethics (e.g., formal Continuing Education or self-directed study).
- 16. Recognizes own limitations or weaknesses (e.g., any type of referral that would be turned down or sent elsewhere)?

## **Ethics and Professional Issues**

- Vignette
- Identification of ethical issues embedded within the vignette
- Identification and resolution of ethical issues in personal experience
- Description of training, background, and approach to Clinical Neuropsychology
- Continuing education strategies
- Professional Involvement

# Sample Ethics Vignette

You have been asked by a family physician to evaluate a 22 year old woman for what she describes as memory difficulties. On examination, you find some inconsistent difficulties with recall and some motor tasks, but otherwise record a performance which is generally within normal limits. Your primary approach to neuropsychology has been via assessment, with very little therapy training or experience. However, since you are concerned about the apparent memory difficulties, you refer the patient to another psychologist in your group practice who provides cognitive rehabilitation.

#### Continued....

The treating psychologist primarily prescribes a series of computer exercises for the patient which he has developed from a "common sense" approach to retraining of cognitive symptoms. During treatment, the patient is charged both for her visits and for the retraining software which she is encouraged to take home and practice. Within one month of beginning treatment, the patient calls you and reports that her symptoms have rapidly improved. She is grateful for your thorough evaluation and invites you to dinner, during which she also discusses an idea for greatly expanding evaluations leading to "more effective" use of cognitive retraining software. This eventually leads to a romantic, social, and business relationship which you and the patient move independently from the group practice. Your former partner agrees to provide software to you at a wholesale price which you can then sell at retail for prescription to your clients.

#### Hints for Ethics & Professional Issues

- Know APA Ethical Principles, but not chapter and verse.
- Know why something is unethical, not just "because APA says so."
- Know what to do when confronted with ethical issues.
- Think through logic of why you do what you do, where you came from, where are you going.
- Be aware of current issues in psychology and neuropsychology.
- Identify how you keep abreast of your field.

# Practice Sample Points

- Knowledge of patients (including appropriate demographic data)
- Consideration of appropriate etiologies and contributing factors, e.g., medications, etc.
- Consideration of emotional and motivational factors
- Awareness of pertinent research and evaluation techniques
- Application of pertinent research, its implications, and evaluation techniques to the candidate's practice
- Justification for procedures employed
- Knowledge of appropriate intervention and follow-up procedures demonstrated
- Consideration of applicable, relevant collateral data (e.g., medical, speech pathology, academics, etc.)
- Awareness of limitations of procedures employed
- Awareness of ethical issues in candidate's practice
- Make note below of any specific problems or outstanding features of the candidate's performance

#### Practice SAMPLE

Two cases already reviewed by at least three reviewers and examiner

Child or adult – examiner matched if so requested

• As always, methods and conclusions should be rational, logical, reasonable, defensible

# Practice Sample

- Each submitted case queried by the examiner
- Questions taken from Practice sample reviewers as well as examiner's own review
- Defense of methods used & conclusions reached
- Clarification of ambiguities
- Supplementation of missing information
- Recommendations for follow-up
- Specialized knowledge in area of Practice sample submission

# Hints for Practice Sample

- Know your patient!
- Know your data
- Know the area which your report addresses
- Be clear on follow-up information preferably after the writing of your report
- Be able to discuss your cases in terms of your overall practice, demonstrating generalized knowledge.
- Practice defending Practice sample in front of colleagues.

#### FACT FINDING

- Perhaps most anxiety-provoking because you are asking the questions and, thus, also managing your time
- BUT it is what you do every day, only compressed into 50 minutes or so
- Examiner has all information you will need to process the case
- You are given choice of child or adult case examiner matched if so requested in advance

# American Board of Clinical Neuropsychology, Inc. <u>Fact-finding Examination</u> SUMMARY REPORT ON CANDIDATE

Candidate

Examiner

Date

- Briefly summarize your evaluation of the candidate's performance and the strengths and weaknesses in each of the three major phases of this exercise. If there were any deficiencies or problems, please give examples of these.
- 1. Fact-finding
- 2. Presentation of conclusions
- 3. Defense of conclusions

# Fact Finding

- Brief vignette of real case, choice of child or adult
- All cases used meet criteria of clarity and availability of data
- Cases are not esoteric by design
- Mock examination
- Questioning of the examiner
- Organization of data & reaching of conclusions
- Explanation & defense of conclusions
- Potential prompts from examiner
- Ability to think on feet if data are re-arranged

## Hints for Fact-Finding

- Be aware of time management
- Show your thinking processes; think out loud
- Take time to keep organized; ask questions as if conducting a real exam and use notes if helpful; MNEMONICS OK AT START, MAKE AN OUTLINE
- Ask for everything in a logical sequence; all data is available
- Do not ask irrelevant question, they waste time and do not show your thinking process
- Data will be explained if you don't understand them
- Practice in Advance! Do Case Finding Exercises.

## **Decision Procedures and Forms**

#### The Decision

- Examiners meet at the end of three candidates' exams, discuss their findings, and render a decision.
- Candidates do not pass or fail any single part of the examination; they pass or fail the entire exam, based on the decision of two out of three of their examiners.
- If Passed, brief note is written, with comments, and forwarded thru ABCN to ABPP. ABPP notifies of award and invites to convocation.
- If Not Passed, longer note is written, with critique, comments, and suggestions for improvement.

#### ABPP, Inc.; ABCN, Inc. [Rev. 8/07]

#### **EXAMINATION RATING FORM**

| Candidate                             | Examiner       | Date   |
|---------------------------------------|----------------|--------|
| Use ratings from 5 to 1 (             | see KEY below) |        |
|                                       | Initial        | Final  |
|                                       | Rating         | Rating |
| Assessment Skills                     |                |        |
| Consultation Skills                   |                |        |
| Intervention Skills                   |                |        |
| Scientific and Professional Knowledge |                |        |
| Ethical and Legal Foundations         |                |        |
| Cultural Diversity Awareness          |                |        |
| Professional Identification           |                |        |
| Interpersonal Interactions            |                |        |
|                                       |                |        |

Overall Decision (First Vote) AWARD NO AWARD UNDECIDED Second Vote, if taken AWARD NO AWARD KEY: 5 = excellent (unusually outstanding); 4 = good;

3 = fair; 2 = weak; 1 = poor

# REASONS FOR FAILURE & SUGGESTIONS FOR CHANGE

Candidate's Name

Date

- Each candidate failing the oral examinations has the privilege of appealing the decisions of the examining committee. Such appeals are reviewed by a special committee of ABPP, with the result that either the fail decision is reaffirmed or the examination is voided. Therefore, it is important that this committee have meaningful and helpful information for conducting a review and making a decision.
- If the final voting results in a failure of a candidate, each examiner must record below the significant reasons for the FINAL DECISION. In order to offer CONSTRUCTIVE FEEDBACK to this candidate, it will be helpful to specify areas in which the examiner feels the candidate needs further growth and development. Please check any of the following statements that you feel apply to this candidate.

| A.  | ASSESSMENT  |
|-----|---|
| -   | Lacks a well-developed rationale for neuropsychological assessment                                    |
| _   | Lacks a theoretical framework for neuropsychological assessment                                       |
| - 1 | Too limited approach to generating assessment information (e.g., "test bound")                        |
|     | Did not formulate adequate assessment impressions   |
| _   | Limited depth in assessment thinking  |
| _   | Demonstrated limited range of assessment skills   |
| _   | Did not use assessment time effectively   |
| _   | Did not make efficient use of the assessment tools selected   |
|     | Seemed unaware of own limitations in assessment   |
|     | Inappropriate application of assessment instruments to patients                                       |
|     | (i.e., failure to consider patient's age, gender, cultural background, ability level, or impairments) |
|     |   |

#### B. DIAGNOSES OR CONCLUSIONS

| Offers formulations on the basis of inadequate information                 |
|--|
| Draws conclusions based on erroneous information or concepts               |
| Fails to acknowledge own limitations in knowledge (e.g., suggests          |
| conclusions about conditions the candidate does not fully understan        |
| Fails to appropriately qualify conclusions in accordance with one's own    |
| limitations  |
| Fails to take account of how the positive predictive value of test results |
| vary with the clinical population to which they are applied                |
| Fails to consider the issues of treatability, seriousness, and prevalence  |
| of the disorder in formulating diagnostic impression                       |
| Fails to consider the risks associated with a false positive or false      |
| negative result in formulating diagnostic impressions                      |
| Fails to integrate scientific knowledge of brain-behavior relationships    |
| (e.g., neuropsychology syndromes)  |
|  |

#### C. CONSTRUCTIVE RECOMMENDATIONS AND INTERVENTIONS

| Inadequate theoretical framework for making recommendations      |
|--|
| Inadequate rationale for recommendations made                    |
| Inadequate assessment to formulate appropriate recommendations   |
| Inadequate use of information that was available from assessment |
| Limited understanding of recommendations and interventions       |
| Limited depth of thinking for recommendations                    |
| Seemed unaware of own limitations in formulating recommendations |

| D.  | ETHICAL PRACTICES  |
|-----|--|
|     | Fails to recognize key ethical issues in the vignette  |
|     | Inadequate knowledge of ethical principles   |
|     | Inadequate sensitivity to ethical problems   |
|     | Unable to articulate rationale for ethical principles  |
|     | Rigid or concrete application of ethical principles  |
| - 1 | Failed to intervene, report, or otherwise take appropriate action in ar ethics-related situation |
| - 1 | Proposes inappropriate or imprudent actions in response to ethical concerns                      |
| - 1 | Evidences a disregard for ethical principles and concerns in own practice                        |

| E.  | KNOWLEDGE BASE  |
|-----|---|
|     | Too limited understanding of psychometrics  |
| -1  | Too limited understanding of neuropsychological assessment  |
| - 1 | Lacks sufficient knowledge of the import of neuropsychological findings (test results)                    |
| -1  | Lacks sufficient awareness of the limitations of neuropsychological findings (test results)               |
| - 1 | Lacks sufficient knowledge of clinical neurology  Lacks sufficient knowledge of the general neurosciences |
| _   | Lacks sufficient knowledge of clinical psychology and psychopathology                                     |
|     |   |

#### After the Examination

- If not passed, time lines for retaking. Pay attention to committee suggestions.
- If passed, ABPP convocation at APA.
- Payment of fees to ABPP, currently \$185 per year. Fee is part of MOC!
- Automatic membership in American Academy of Clinical Neuropsychology.
- Afterward, payment of dues to Academy, currently \$175 per year.
- Participation in Academy activities and functioning of the board through Practice sample reviews, examinations, elections, mentoring.

# American Academy of Clinical Neuropsychology

- AACN- incorporated in 1996
- Initial meeting February, 1997, Orlando
- Welfare of the Patient
- Support for ABCN
- Education
- Advocacy for Quality Practice
- Potential for Advancement of Science and Practice in Clinical Neuropsychology

# Current AACN Membership

- Active Members 918
- Senior Members 58
- Inactive Members 101
- Student Members 252
- Affiliate Members 348

#### American Academy of Clinical Neuropsychology

- Annual Meeting!!!!
  - -June 8-10, 2017 Boston
    - Basic
    - Advanced CE
  - -Business Meeting
  - -Posters
  - Exhibits

# AACN Board Members 2016

Julie Bobholz (2014-2019)

Michelle Braun (2013-2018)

Michael Chaefetz (2012-2017)

David Drane (2013-2018)

Nancy Hebben (2015-2020)

Doug Johnson-Greene (2014-2019)

Donna Locke (2014-2019)

Paul Mattis (2013-2018)

Chris Morrison (2014-2019)

Richard Naugle (2012-2019)

Karen Postal (2011-2019)

Lisa Radvin (2012-2017)

Anita Sim (2016-2021)

Sara Swanson (2011-2019)

Cheryl Weinstein (2012-2017)

Tim Wynkoop (2016-2021)

Stephanie Towns, Student Representative (2015-2016)

# Officers & Appointees 2016-2018

- President
- President-Elect
- Secretary
- Treasurer
- Treasurer-Elect
- Executive Secretary
- Conference Chair
- Conference Co-Chair
- IT Manager

**Karen Postal** 

**Chris Morrison** 

Sara Swanson

**Richard Naugle** 

**Nancy Hebben** 

**Linas Bieliauskas** 

Sandra Koffler

Lisa Radvin

**Robert Davis** 

# Continuing Education Activities

- Workshops geared to two levels
  - Maintenance of proficiency for specialists
  - Preparation for board certification

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- Workshops at annual meeting started in June, 2003 in Minneapolis, and other occasional venues.
   Meeting in 2017 is June 8-10 in Boston, MA
- Workshops concentrated at annual meeting
  - Peer supervision and study groups

## **Board Preparation Resources**

#### The History

"BRAIN" is an ABPP/CN study group that was started by a few candidates back in 2002. Formally named "BRAIN" later. Lots of info about the group has been compiled and is now available on the web, so it might be easiest to just check that out: <a href="http://www.cincinnatichildrens.org/svc/alpha/n/neurobehavioral/brain/">http://www.cincinnatichildrens.org/svc/alpha/n/neurobehavioral/brain/</a>.

### "Brain"

BRAIN (which stands for "Be Ready for ABPP in Neuropsychology) is becoming an increasingly well organized group designed to help our colleagues obtain their ABCN certification. While it was originally started by a small group of friends (prior to AACN's mentoring program), it has expanded to include over 125 members. The listserve consists of neuropsychologists at all stages of the ABPP process, from individuals who are still thinking about turning in their credentials to over 30 people who are now ABCN diplomates. They have designed study notes (which can be viewed at the website) and also provide supportive suggestions and guidance to candidates as they proceed through the ABPP process. They have also been able to provide a forum for individuals to develop study groups for each stage of the ABPP process, as well as provide a little bit of inspiration and positive peer pressure. They now have an official listserve (thanks to Bob Ivnik's generosity) and website (thanks to Dean Beebe's efforts).

## "Brain"

- New members are accepted upon referral from a member of AACN or an already existing member of BRAIN who may or may not have completed the ABPP/CN process (this person is considered the new member's "sponsor").
- If a supervisor is not a member of AACN or Brain, they should contact someone who is.
- The only other criterion to join BRAIN is that the new member be alicensed psychologist.

# Brain (continued)

All information on becoming a member of BRAIN can be obtained on the website: <a href="https://www.theaacn.org">www.theaacn.org</a>

 Board Certification in Clinical Neuropsychology Resource Guide, (available under the Study Materials link at)

#### Books

Board Certification in Clinical
 Neuropsychology: A guide to becoming
 ABPP/ABCN certified without sacrificing your
 sanity, authored by Armstrong, Beebe,
 Hilsabeck & Kirkwood (2008) and published by
 Oxford University Press.

#### More.....

- The Clinical Neuropsychology Study Guide and Board Review, edited by Stucky, Kirkwood, & Donders (2013, October) and published by Oxford University Press.
- <u>Summary</u>: The text is divided into three sections covering the foundations of clinical neuropsychology, fundamentals of assessment, and specific disorders/conditions. Additional highlights include: 1) detailed charts and summary tables, 2) concise coverage of pediatric, adult, and geriatric issues and conditions, and 3) over 500 mock exam questions.

#### Additional Activities

- Official Journal: The Clinical Neuropsychologist
- Task Forces
- Position Papers
- Mentoring Program
- Member Listserve
- Community Listserve
- Reduced Fee for Annual Meeting
- Directory Listing
- Annual Dues \$175

# And, Conduction of Salary Survey

- The American Academy of Clinical Neuropsychology, National Academy of Neuropsychology, and Society for Clinical Neuropsychology (APA Division 40) 2015 TCN Professional Practice and 'Salary Survey': Professional Practices, Beliefs, and Incomes of U.S.Neuropsychologists
- Jerry J. Sweet, Laura M. Benson, Nathaniel W.
   Nelson & Paul J. Moberg. The Clinical Neuropsychologist, 2015
   Vol. 29, No. 8, 1069–1162

 Can be used for reference when entering job market or for relative comparisons.

# For Example.....

Table 11. Income at varying intervals of years in clinical practice

|                   |      |       |        |       | Percentile |       |       |       |            |
|-------------------|------|-------|--------|-------|------------|-------|-------|-------|------------|
| Years in practice | n    | Mean  | Median | SD    | 25         | 75    | 95    | 99    | Min-Max    |
| <1-5              | 306  | 98.8  | 93.2   | 25.8  | 84.0       | 107.0 | 140.7 | 189.7 | 50.0-315.0 |
| 6-10              | 234  | 120.8 | 105.0  | 38.6  | 98.0       | 131.3 | 201.3 | 267.1 | 50.0-275.0 |
| 11-15             | 148  | 143.6 | 125.0  | 62.3  | 107.0      | 160.0 | 240.5 | 463.8 | 50.0-525.0 |
| 16-20             | 112  | 167.6 | 136.0  | 84.0  | 110.0      | 200.0 | 351.8 | 446.8 | 60.0-450.0 |
| 21-25             | 130  | 168.2 | 142.5  | 96.3  | 114.8      | 180.0 | 350.0 | 732.9 | 70.0-860.0 |
| >25               | 200  | 208.7 | 170.0  | 124.8 | 125.0      | 250.0 | 499.2 | 699.1 | 70.0-916.0 |
| All years         | 1130 | 143.5 | 118.0  | 83.8  | 97.0       | 157.0 | 304.5 | 500.0 | 50.0-916.0 |

Notes: Income values are in 1000s of dollars. Includes licensed clinicians who are currently practicing fulltime or more; excludes postdoctoral trainees and those earning <\$50,000 annually.

# And, relevant to board certification

Table 45. Mean differences of income, income satisfaction, and job satisfaction for ABCN and non-ABCN respondents

|   |                |       | ABCN | l status           |       |      |     |    |
|---|----------------|-------|------|--------------------|-------|------|-----|----|
|   | ABCN certified |       |      | Not ABCN certified |       |      |     |    |
| Variable  | n              | Mean  | SD   | n                  | Mean  | SD   | t   | d  |
| Gross psychology income                         | 433            | 161.6 | 89.3 | 812                | 125.3 | 77.3 | 5.6 | .4 |
| Years of clinical practice                      | 535            | 17.1  | 10.4 | 988                | 12.9  | 11.0 | 7.2 | .4 |
| Peer-reviewed publications <sup>a</sup>         | 517            | 24.1  | 39.5 | 898                | 11.5  | 22.9 | 6.2 | .4 |
| Professional meeting presentations <sup>b</sup> | 513            | 32.9  | 46.6 | 882                | 18.5  | 32.7 | 5.7 | .4 |
| Professional volunteer activities (hours)       | 3.52           | 2.1   | 2.3  | 537                | 1.7   | 1.9  | 3.3 | .2 |
| Income satisfaction (0-100)                     | 483            | 75.7  | 21.0 | 820                | 70.4  | 24.5 | 4.0 | .2 |
| Job satisfaction (0-100)                        | 476            | 80.6  | 18.7 | 815                | 77.6  | 21.0 | 2.6 | .1 |
| Work-life balance satisfaction (0-100)          | 474            | 70.3  | 24.2 | 803                | 68.7  | 25.9 | 1.1 | .1 |

Notes: Excludes postdoctoral trainees. Income values are in 1000s of dollars for respondents who are licensed and currently practicing full-time or more.

ANCOVAs comparing gross psychology income, number of peer-reviewed publications, and number of professional meeting presentations between ABCN status using years of licensed clinical practice as a covariate continued to result in statistically significant differences in all three variables at  $p \le .001$ .

<sup>b</sup>Refers to presentations of original research in poster or oral form at a professional meeting that required abstract submission.

alneludes primary and co-authorship.

 $<sup>***</sup>p \le .001$ ;

 $<sup>**</sup>p \le .01$ .

#### Affiliate Members & Student Members

- Application
- \$100 annual fee (\$55 students)
- Official Journal, The Clinical Neuropsychologist, Child Neuropsychology
- Reduced Annual Meeting Fees
- Opportunity for Student Volunteers
- Community Listserve

# Web Sites

www.theabcn.org www.theaacn.org



Pamela M. Dean, PhD, ABPP-CN



Jason R. Soble, PhD, ABPP-CN

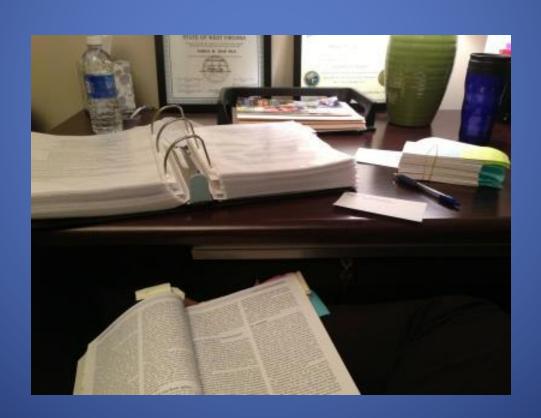


# Board Certification Demystifying the Process

Pamela M. Dean, Ph.D., ABPP &

Jason R. Soble, Ph.D., ABPP

# Going Through Each Step of the Exam



## Optimizing Time to Completion

#### October

#### Complete Application Start early and submit materials as they become available to you Look for Work Samples \*As soon as you are licensed and no longer writing supervised reports Study for Written Exam Results in about 5 weeks Take Written Exam **Submit Practice** Results in about 3 months Samples Sign up for Oral Exam Take Oral Exam

1 year 4 months

**Awarded Board Certification** 

#### **Barriers to Your Success**

- 1. It's overwhelming
  - a. Where to begin
  - b. Not knowing what you don't know
  - c. Trying to read too much
- 2. Work/life balance
- 3. Setting aside dedicated time to study
- 4. Procrastination
  - a. Setting too long of a timeline: forgetting what you learned

#### Sample Study Schedule

|     | Date   | торіс  | Subcategories                                   | Book  | Chapters   | ABPP BRAIN Handouts  |
|-----|--------|--|---|---|--|--|
| 1   | 29-Jul | Neuroanatomy Overview  | Autism, Aspergers, PDO, Lead Poisioning         | Morgan & Ricker                             | 5 (on your own if needed), 8 (Pam), 11 (Mary), 15 (Nicole) | Brain development 1 & 2; neuroanatomy overive, behavioral neuroanatomy |
|     |        | Visual System  | Prematurity and Low Birth Weight                | Blumenfeld                                  | 2 & 11 (Pam)   | Plasticity   |
|     |        | Neurodevelopmental Disorders   |   | **DSM-IV Criteria childhood disorders       |  | Recovery, Sparing, & Reorganization                                    |
|     |        |  |   |   |  | Seguelae of Substance Abuse in Children                                |
|     |        |  |   |   |  | CNS Cellular Organization and NTs                                      |
| 2   | 29-Jul | LD, ADHD, NVLD   | Adults  | Morgan & Ricker                             | 16 (Mary), 17 (Nicole), 36 (Pam)                           | Childhood disorders  |
|     |        | Neuroradiology Review  | Pediatrics                                      | Blumenfeld                                  | 4 (Lisa)   | LDs  |
|     |        | and the second s |   | **DSM-IV Criteria for LDs/Language D/o      | - ()   | Nonverbal Skills   |
|     |        |  |   | parent enterior or entirenduale alle        |  | Agraphia/Acalculia   |
| 3   | 5-Aug  | Brain: Cranium, Ventricles, Meninges   | HIV/AIDS, Infectious, toxic-metabolic           | Miller & Boeve                              | 23 (Nicole), 25 (Usa)                                      | Infectious diseases; cranium, ventricles, meninges                     |
|     |        | Infectious diseases  | Autoimmune, paraneoplastic/RPD                  | Blumenfeld                                  | 5 (Mary)   | HIV  |
|     |        | IIII SAAA WAAAAA   | containing the mire described in a              | Morgan & Ricker                             | 26 (Pam)   | Arbovirus/bacterial infections   |
|     |        |  |   |   |  | Nutritional deficiencies   |
|     | S-Auer | Cortiospinal Tract & Motor Pathways  | Hydrocephalus/Spina Bifida, Cerebral Palsy      | Morgan & Ricker                             | 9 (Nicole)   | Hydrocephalus  |
| 4   |        | Somatosensory Pathways   | injurios chimatal ahine mines, ecicinei neral   | Blumenfeld                                  | 6, 7 (Mary and Nicole)                                     | Corticospinal tract & Motor systems                                    |
|     |        | Motor and spinal developmental d/o (peds)  |   | Yeates-Peds book                            | 22   |  |
|     |        | motor and spinal developmental dyo (peds)  |   | 162055-7 605 DOOK                           | 11   | Somatosensory pathways   |
| 6   | 12.400 | Cerebral Hemispheres & Vascular Supply   | Hemorrhages, AVMs, aneurysms                    | Blumenfeld                                  | 10 (pam), 12 (pam), 13 (Mary)                              | Combani hamisahan and manda comba                                      |
| 3   |        | Brainstem I & II   | nemormages, Avvio, andurysms                    | Morgan & Ricker                             | 10 (pam), 12 (pam), 13 (Mary)<br>19 (Nicole), 20 (Lisa)    | Cerebral hemisphers and vascular supply                                |
|     |        | Brainstem I & II   |   | Morgan & Nicker                             | 19 (Nicole), 20 (Lisa)                                     | Higher order cerebral functions  |
|     |        |  |   |   |  | Agnosia/Apraxia/Neglect/Anosagnosia                                    |
|     |        |  |   |   |  | Brainstem I-III  |
| -   | 12 1   | Basel assets   | HD, PD, PD+                                     | Miller & Boeve                              | 15 (Nicole), 20 (Pam)                                      |  |
| 6   |        | Basal ganglia<br>Subcortical dementias   | HU, FU, FU+                                     |   |  | PD/HD/PD differential  |
|     |        | Subcortical dementias  |   | Morgan & Ricker                             | 28 (Pam), 32 (Mary)  | Basal ganglia; signs of BG lesions                                     |
|     |        |  |   | Blumenfeld                                  | 16 (Lisa)  |  |
|     |        |  |   |   |  |  |
| -   | 40.4   | Discharge & Householmers   | A disk Years are                                | Marrier & Million                           | 4 March 40 March 20 March                                  |  |
| - / |        | Pituitary & Hypothalamus   | Adult Tumors                                    | Morgan & Ricker                             | 4, (Pam) 10 (Pam), 29 (Mary)                               | Adult brain tumors   |
|     |        | Tumors   | Pediatric Tumors                                | Blumenfeld                                  | 17 (Lisa)  | Pediatric brain tumors   |
|     |        | Psychometrics, Norms/Test Construction, Design Stats   |   | Spreen & Strauss                            | 1 (Nicole), 2 (Pam)  | Sensitivity-Specificity; Base rates                                    |
|     |        |  |   | WMS-III and WAIS-III Technical Manual       |  | Test Construction  |
|     |        |  |   |   |  | Design & Statistics  |
| 8   | 19-Aug | Higher Cortical Functions  | Cerebral Cortex                                 | Blumenfeld                                  | 19 (Mary)  | Pediatric TBI  |
|     |        | TBI  | Adult & Pediatric TBI                           | Morgan & Ricker                             | 21 (Nicole), 31 (Pam)                                      | MS   |
|     |        | Demyelinating Conditions   | Multiple Scierosis                              |   |  | Disconnection syndromes, white matter                                  |
|     |        |  |   |   | No notes on 19, 21   | Frontal lobes, modesi of frontal lobe function                         |
|     |        |  |   |   |  | Cortices-Parietal & Temporal; Higher order cortical functions          |
| 9   | 26-Aug | Dementia   | AD, LBD,PPA, FTD                                | Miller & Boeve                              | 2 (nicole), 4 (Lisa), 5 (Pam), 18 (Lisa) 19 (Pam)          | Depression vs. Dementia  |
|     |        | Neurotransmitters  |   | Chapter on NTs from Sarah Lageman           |  | Aphaisa syndromes; agnosia   |
|     |        |  |   |   |  |  |
|     |        |  |   |   |  |  |
| 10  | 2-Sep  | Limbic System  | Adult Epilepsy                                  | Morgan & Ricker                             | 23 (Pam), 27 (Lisa) 37 (Mary)                              | Seizure disorders  |
|     |        | Seizure Disorders  | Pediatric Epilepsy                              | Blumenfeld                                  | 18 (Nicole)  | Wada mapping   |
|     |        | Amnestic disorders   | Hypoxic/anoxic conditions                       |   |  | Umbic system, emotion  |
|     |        |  |   |   |  | Memory and learning  |
|     |        |  |   |   |  | Anoxia   |
| 11  | 9-5ep  | Cerebellum   | Schlzophrenia/psychotic disorders, bipolar, MDD | **Grant & Adams                             | 18, 19, 21/22 - Self Review of Each Chapter                | General pharmacology, Neurotoxins & Drugs of abuse                     |
|     |        | Psychiatric Disorders  | Alcohol & drug abuse                            | Blumenfeld                                  | 15 (Pam)   | Cerebellum   |
|     |        | Substance Abuse  |   | **DSM-IV Criteria for mood/psychotic disord |  |  |
|     |        |  |   | ., .,                                       |  |  |
| 12  | 16-Sen | REVIEW WEEKS 1-6 & 7-12  | 1   |   |  |  |

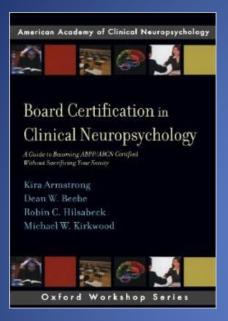
## **EXAM DAY September 14-29**

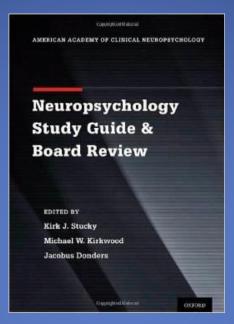
Ch 18 - Neurobehavioral ETOH 56 p

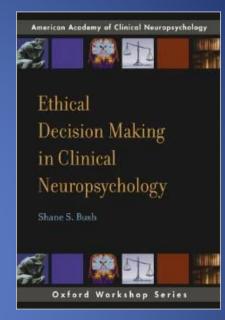
Ch 19 - NP of Drug Abuse 24 pp Ch 21 - Schizophrenia - 15 pp

Ch 22 - NP of Depression - 36 pp

# **Helpful Books**

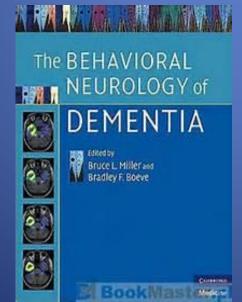


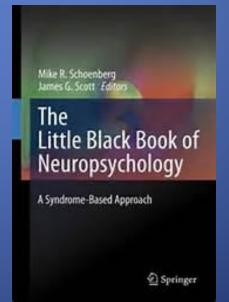


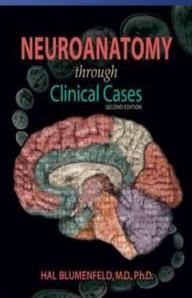


Textbook of Clinical Neuropsychology

> Edited by Joel E. Morgan and Joseph H. Ricker







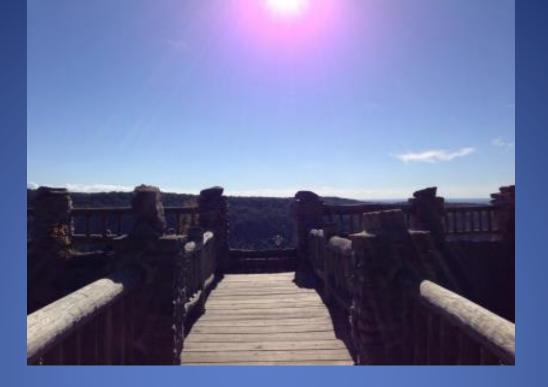
### **Acronyms for Etiologies**

- V Vascular
- I Infectious
- T Toxic/Traumatic
- A Autoimmune
- M Metastatic/Metabolic
- I Infarct
- N Neoplasm/Nutrition
- C \*Crazy (not PC)
- **D** Degenerative/Developmental
- **E Epilepsy**

#### **How to Prepare**

#### BRAIN site

- Sample Exams
- Flashcards people have submitted.
- Outlines
  - Some have incorrect info...take it with a grain of salt and double check anything you aren't sure of.
- Sample Exams in the Stucky Book at the end of each section and a full exam in the back.
- Practice Samples....keep it vanilla, have mentors review prospects
- Oral Exam Options
  - Can get connected with a mentor
  - Can be paired with a volunteer mock examiner via phone/skype (its nice b/c they have a potentially very different way of practicing)
  - Can be paired with an oral study group (take turns examining each other with FF, PS, and Ethics)
  - Practice talking about yourself; your education, your practice, your research/clinical interests
  - Many of you will work with or will have worked with an ABPP; ask if they are willing to set up a full mock. Its time consuming (3 hour chunk) but very helpful!!!
  - Review APA Ethical Principles
  - Read professional white papers for issues relevant to our field



- There is a list of recommended readings
  - \*\*some are repetitive, use your judgment
- BRAIN
- You can Join a study group
- \*\*Take the day off before your exam if you can.
   Get down with your Zen!

#### Preparing for the Written Exam: Practical Advice

- No "one size fits all" approach
- Know Thyself
  - Identify your preferred (and successful) method of learning/studying
  - Assess personal knowledge strengths and areas of weakness based on prior training and professional activities
  - Develop a focused study plan accordingly
- Make judicious use of study resources
  - Wealth of resources available to candidates (books & professional advice)
  - No one can realistically read everything or utilize all resources
  - Identify what method and resources are most likely to work for you
- Set a reasonable (and realistic) preparation timeline
  - Structured outline/schedule with some wiggle room (e.g., 3-4 months)
  - Include benchmarks along the way (e.g., practice exam every 3 weeks)

#### While preparing for the written exam...

- Also keep the next step of the process (i.e., practice samples) in mind
- Remember that identifying good samples that represent the range of your practice & preparing them takes time!
- Don't wait until you pass the written exam to start looking for cases
  - This can unnecessarily prolong the process
  - If you identify good cases, start preparing them and have them reviewed by colleagues so they are ready to be submitted

#### **Practice Samples**

- Two neuropsychological cases representing original work. Each should differ sufficiently to demonstrate
  a range of clinical knowledge and assessment skill and that the candidate practices CN at the specialists
  level of competence.
- Samples consist of written report, raw test protocols, data summary sheet +/- supplementary materials
- \*\*Make sure to remove all identifying information\*\*\*
  - Make sure all test protocols are correctly scored (rescore everything)
- Samples are reviewed independently by 3 ABCN specialists, now standardized in the review process.
   Two reviewers must rate the sample as "acceptable" to advance to the oral exam.
- If it is not accepted, candidates are notified along with a summary of issues raised by reviewers.

  Candidates can continue to resubmit new samples until it is accepted, or until the expiration of the candidacy period (7 years).
- Results in about 3 months
- What's a good sample and how to choose
- Look at deadlines for submission and be proactive!!!!
- Addendum to explain rational

### **Practice Samples: Practical Advice**

- It takes time and effort to review your cases and select appropriate sample...plan for this!
- Finding clean cases can be more or less challenging depending on your setting and population(s) served
- Should represent a sampling of your clinical practice
- Be creative in selecting variety, but also comfortable in defending what you submit

## The Oral Exam

It's less about what you know... and more about how you think



#### **Oral Examination**



- Fact Finding
- Ethics/Professional Development
- Practice Sample Defense
- Testing cadre
- Orientation and welcome
- What the day looks like
- When its over....
- Takes about 2 weeks until you are notified by email. I found out in just under 1 ½ weeks.

## **Fact Finding**

- You'll be given the option of a child or adult case
- Examiners are interested in seeing how the candidates collect information, evaluate and integrate information that is provided, conceptualize the case, construct a list of differential diagnoses and make recommendations.
- Its not about getting it right! Its about your process, organization, rational, and reasoning
- Even if you come to the correct conclusion, you may be challenged
- The most awkward part is talking your thoughts out loud and finding a balance between over and under talking.
- The biggest parts to this exam:
  - 1. Managing your time
  - 2. Managing your anxiety
  - 3. Demonstrating your knowledge

- Exam is 50 minutes
- You may take notes; they will not leave the room.
- 5 minute outline
- 15 min gathering history
- 5-10 min gathering data
- 10 min conceptualization/conclusion/recommendations
  - Nature and severity of neuropsych issues
  - Underlying neuroanatomical considerations
  - Probable etiologies
  - Recommendation to pt, family, healthcare

#### Background and Behavioral Observation Information Gathering: Identifying Information Complaints Level of Functioning/IADLs Is there difficulty/impairment described? Social History Occupational History Describe onset and course Medical History Neuroimaging/Diagnostic Tests What are some possible etiological Medications considerations/dx? Motor/Sensory Complaints Substance Use/Abuse Psychiatric/Substance Abuse History Prior NP Evaluation? Behavioral Observations Test Data Gathering: At each step, comment on: Is there impairment? Effort/Invalidating information Premorbid Estimations What is the nature of the impairment? General functioning/IQ Characterize the impairment Achievement Does this confirm/disconfirm your dx Language considerations? Visuospatial Memory Attention / Information Processing Motor/Sensory-Perceptual Executive Functioning Personality/Psychopathology Overall neuropsychological profile of abilities Implications for anatomical correlates Conceptualization: Diffuse/Local Lateralizing? 1. Pull all the data together and describe the impairments: -> Static/Progressive Cortical/Subcortical Implications of history, behavioral observations, and test findings for etiologies Neurodegenerative Movement D/O 2. Discuss differential diagnosis considerations: 0 Vascular Traumatic Brain Injury Hydrocephalus 0 Toxic/Metabolic/Endocrine/Systemic 0 Recommendations: Infectious 0 Neoplasms/Cancer Treatments Further assessment? Seizure D/O 2. Interventions? Education Anoxia/Hypoxia b. Treatment Residual childhood conditions Referrals Autoimmune/Demyelinating Follow-up Psych/Substance Abuse/Med Effects

#### **Practice Sample Defense**

- This is an opportunity to evaluate the breadth and depth of knowledge and skill in an area selected by YOU.
- Reviewers from your submission suggest questions for use during the exam and the examiner also generates his/her own questions.
- You are expected to be well prepared to discuss and defend all aspects of the cases.
- Equal time for both cases is not necessary.
- You may have a blank copy of your report as a safety net, but you should know it inside and out.
- Be prepared to answer:
  - Specific aspects of the cases or you may be challenged to explain or defend your work based on current standards (i.e., norms or "outdated tests" used)
  - Psychometrics, diagnostic criteria, medications etc.
  - \*\*Having others review your work can help you to prepare

#### **Getting Organized**

- Get your applications in early. Remember, if apply before you are licensed, there is a discounted fee (\$25.00!!)
- Sign up for BRAIN
- Download the Candidate Manual from ABCN. It has ALL of the information you need to organize and prepare yourself throughout the process
- Options: Study alone or get connected with a study group through BRAIN.

## **Start Early!**

- As soon as you are licensed, start looking for good cases that could potentially be submitted for the written sample.
  - Remember....vanilla is key!
  - Have a mentor review your sample for viability of use
  - Keep a few on the back burner as you prep for the written exam
  - Doing this allows for faster turn around once you pass the written exam portion.

#### BRAIN





#### **ABOUT BRAIN**

**LEADERSHIP** 

**BRAIN LIST-SERVE** 

LIST-SERVE RULES

MANAGING YOUR BRAIN LIST-SERVE ACCOUNT

THE FOUR STEPS OF ABPP/ABCN CERTIFICATION

**CREDENTIALS REVIEW** 

**WRITTEN EXAM** 

**PRACTICE SAMPLES** 

ORAL EXAMINATION

#### **MOCK EXAMS**

**MOCK EXAM 1 QUESTIONS** 

**MOCK EXAM 1 ANSWERS** 

**MOCK EXAM 2 QUESTIONS** 

**MOCK EXAM 2 ANSWERS** 

**MOCK EXAM 3 QUESTIONS** 

**MOCK EXAM 3 ANSWERS** 

AACN STUDY GUIDE ANSWERS TO SAMPLE QUESTIONS

**MOCK ETHICS VIGNETTES** 

**EXTRA RESOURCES** 

**FLASH CARDS** 

SAMPLE STUDY SCHEDULES

ORAL EXAMINATION STUDY SCHEDULE



## Be Ready for ABPP in Neuropsychology

An AACN Study Support Network

# Closing Thoughts on our Own Experiences

## Helpful Links

- The AACN website
- Exam Schedule and Deadlines
- Examiner Cadre
- AACN Resources for Board Certification
- ABPP Generic Application
- General Info for Applicants with Disabilities
- BRAIN website
  - Mentorship Program: <u>Dr. Brandon Baughman</u>
  - Written Exam
  - Practice Samples
  - Oral Exam
- Guidelines for Practice Samples in Clinical Neuropsychology
- ABPP Page on Clinical Neuropsychology with links to downloadable related documents: <a href="http://www.abpp.org/i4a/pages/index.cfm?pageid=3354">http://www.abpp.org/i4a/pages/index.cfm?pageid=3354</a>
- http://www.tandfonline.com/doi/pdf/10.1080/13854046.2014.935484
- Annunciata Porterfield, ABCN Executive Assistant

Q&A

# Thanks to ABCN, AACN BOD and the Relevance 2050 Committee for your support!

Any questions and/or feedback, please contact us at <a href="mailto:accustor">accustor</a> at <a href="mailto:accustor">accustor</a> accustor</a> dentpipeline@gmail.com

This webinar will be available on **YouTube** and on the AACN Students **website**