NORA Fellowship Level 3 Paper Requirements

The Level III process is designed to develop a candidate's expertise in an area of neuro-optometric rehabilitation which the candidate has chosen, as well as improve the quantity and quality of information in neuro-optometric rehabilitation in the clinical and scientific literature. Below, you will find information that will be helpful in the process of completing Level III. The specific guidelines are listed at the end of this document.

1. Where to begin?

You should start by choosing an area of particular interest in neuro-optometric vision rehabilitation. You will then **consult with the FNORA chair for approval via email: FNORAOfficial@gmail.com**. It is strongly recommended you attend the writing workshop that is held annually at the NORA conference to aid with the writing process. An outline of the paper should be written prior to the annual conference and will be used during the workshop writing activities.

2. Workshop Preparation

The candidate should prepare in advance by carefully reading the two referenced papers by Dr. Ciuffreda and colleagues below and the sample of a well written case report. The candidate will write a title and outline with abstract on their potential manuscript topic, or even bring the draft of their initial manuscript. In addition, the candidate should begin to peruse journals in optometric and related literatures to see how successfully published papers are formatted and written.

Writing a Publishable Paper- Where Do I Start? A Perspective
Kenneth J. Ciuffreda, OD
Barry Tannen, OD
Diana Ludlam, BS, COVT
http://pubs.covd.org/VDR/issue2-1/index.html

How to Read a Research Paper? A Perspective
Kenneth J. Ciuffreda, OD
Diana Ludlam, BS, COVT
Naveen Yadav, BS Optom
http://pubs.covd.org/VDR/issue2-3/index.html

Well Written Case Report Sample
Hemi-Spatial Neglect as a Consequence of Acute Cerebrovascular Accident: a Teaching Case Report | The Journal of Optometric Education (opted.org)

Other Recommended Resources
https://www.amazon.com/Writing-Health-Professions-Karl-Terryberry-dp-1711472182/dp/1711472182/ref=dp_ob_title_bk

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5686928/

The outline needs to be reasonably detailed regarding the proposed content, and the paper must, in the end, be a reasonable approximation of the outline, although certainly, as you research a topic your knowledge and ideas may well change, and this will often be reflected in the direction of the paper. The final manuscript must be reviewed and accepted by the Level III peer-review committee **prior** to submission to publication (either a peer-reviewed journal or book chapter). It is

understood that reviewers and editors at the publication will sometimes require changes in the manuscript, and these do not require review by the Level 3 committee following official submission for publication.

NOTE: The Fellowship candidate must be first author.

3. Assigning a Mentor

Once the candidate has received topic approval for the Level 3 paper and submitted a well-written outline/abstract, a FNORA mentor will be assigned by the FNORA Fellowship Chair. It is the responsibility of the mentor to offer general comments for improvement, and be conservative in editing, as the candidate needs to learn the writing process. All correspondence between the mentor to the candidate should be cc;d to FNORAOfficial@gmail for monitoring progress.

4. Article Submission

Once the candidate and mentor determine the paper is suitable for peer-review, the candidate will email the article to the Chair at FNORAOfficial@gmail.com. The FNORA Fellowship Chair will submit the paper to the Level 3 peer-review committee for evaluation, comments, and approval before submitting it to a journal. Prior publications are not eligible. Once the article has been accepted by the peer-review committee, the candidate can then submit to a peer-reviewed journal of their choice. They must receive written confirmation of acceptance to publication and inform the FNORA Fellow Chair prior to the last step of the Level 3 requirement, make a 25-30 minute PowerPoint presentation of the FNORA Level 3 paper at the NORA pre-conference. Once all requirements have been met, the fellowship shall be awarded to the candidate.

Suggested types of papers

1. A retrospective study.

An example retrospective study reviews cases where you prescribed yoked prism, matched for functional level or for site of injury, and determined whether the patients continued to require the same prism over time, or whether it changed. If it changed, what were changes related to?

Another example retrospective study reviews cases with various combinations of neglect and hemianopsia based on scientifically supported criteria and looks at recovery with treatment (prisms or therapy).

2. A prospective study.

A prospective study observes outcomes, such as the development of a dysfunction, during the study period and relates this to other factors such as suspected risk or protection factor(s). This type of study usually involves taking a cohort of subjects and watching them over a period of time.

3. A detailed, unique case report.

A case report should include the scientific underpinnings of the condition (e.g., a summary of the radiologist's report findings) and intervention (relating the treatment to the clinical and/or theoretical science supported in the literature).

4. A detailed, well-documented case series

The case series should include a common underlying theme and scientific reinforcement. For instance, concentrically constricted visual fields, PTVS, visual-spatial neglect cases, or hemianopia, with and/or without neglect, looking at recovery and variables affecting recovery.

6. A literature review

Example, a critical literature review that integrates vision or rehabilitation literature in a new way and improves our (or that of other health care professionals involved in brain injury rehabilitation) insight into the nature of some aspect of vision rehabilitation. It cannot just be a review that looks at the history of a particular aspect of literature and says 'this person did this, and the next study did that, etc." with no depth/critical component.

Another example, a critical literature review about a particular aspect of vision deficit in neurological compromise, and presents specific therapies to address that deficit, relating the therapies to scientific and conceptual underpinnings of the deficit.

Below are article formats to help you. However, before beginning your writing, you should decide on the journal, where you will submit the work and look online, or in a copy of the journal for author instructions that will guide you specifically on how to format the article for submission to that journal.

Suggested Format Guide

Research article

1. Title---short, clear, and descriptive.
2. Abstract (not more than 1 page)---purpose, methods, results, and conclusions.
3. Introduction (3-5 pages)---why did you do the study? Provide background information with citations. Start broad and get more specific as you proceed.
4. Methods (3-5 pages) ---what did you do?---it should be explicit like a 'recipe' for baking a cake---3 sections---subjects, apparatus, and procedures.
5. Results (3-5 pages)---what did you find?---figures, tables, stats, along with a narrative----start with your most important finding.
6. Conclusions (3-5 pages)---what do you think it means? Discuss related sciences.
7. References---20-40.
8. The paper should help others become/remain cognizant of the multidisciplinary nature of brain injury rehabilitation.

Case studies, or retrospective case series

1. Title---short, clear, and descriptive.
2. Abstract (not more than 1 page)---purpose, methods, results, and conclusions.
3. Introduction (3-5 pages)---Describe the neuro-optometric rehabilitation importance of the case report or series, with a critical review of the existing literature providing context for the case report or series. Provide background information with citations. Start broad and get more specific as you proceed.
4. Case study or case series (3-5 pages)

    a. Patient history--- patient initial intake data, including the nature of the neurological compromise. In the case of a case study, review the general rehabilitation completed with the patient when the neuro-optometrist became involved.
    b. Neuro-optometric data gathered--- be careful to write for a general rehabilitation, OD or OMD audience defining terms that are not commonplace mainstream medical terms.
    c. Treatment---describe your treatment modalities. Compare initial neuro-optometric data with ending data. Figures, tables, stats, are helpful if available, along with the narrative. Start with your most important finding.
5. Conclusions (3-5 pages)---what do you think the data means.
6. References---20-40.
7. The paper should help others become/remain cognizant of the multidisciplinary nature of brain injury rehabilitation.

Suggested Journals

It is best to think about where you would like your paper to be submitted early in the process, as each journal has a different format in terms of content they publish, length of articles, reference formatting, etc. that it will help to know at the outset of your writing.

Examples of appropriate journals would be in the areas of :

- Optometry
    - Optometry and Vision Science
    - Optometry and Vision Development (COVD Journal)
    - Journal of Behavioral Optometry (OEP Journal)
- Physiatry
    - Archives of Physical Medicine and Rehabilitation
- Occupational Therapy
    - American Journal of Occupational Therapy
- General Neurological Rehabilitation
    - NeuroRehabilitation
    - Journal of Rehabilitation Research and Development
    - Brain Injury Professional
- Journals in the areas of physical therapy, vestibular, neurological case management, neuro-ophthalmology, rehabilitation nursing, and life care planning
- More scholarly, rather than clinical journals in the areas of psychology, brain, vision
    - Brain Injury
    - Brain and Cognition
    - Vision Research
    - Investigative Ophthalmology and Visual Science

Literature Search Suggestions

When you are doing background research on your topic, there are resources that may be of value in finding information. Besides your local university library, OEP has multiple materials. The suggested reading list for the curriculum is helpful. However, primary sources from peer reviewed biomedical journals are most easily searched on **PubMed**, the US National Institutes of Health and National Library of Medicine database at www.ncbi.nlm.nih.gov/sites/entrez (it is easiest to just Google PubMed). There are other sites which will have more relevant information to many of the more psychological/perceptual aspects of vision such as **PsychLit** (which again, you can Google). There is a fee which must be paid on an hourly or daily basis, so make sure you know what you are looking for.

Once there, you can search using keywords or phrases. Phrases must be enclosed in parenthesis or the terms will be searched separately. **AND** (in caps) means that the search terms on either side of the AND must be included for the article to be included in the results. For example, hemianopia **AND** prism will produce articles that include both the words hemianopia and prism. **OR** means either of the search terms on each side of the OR is sufficient to include the resulting article, e.g. hemianopia **OR** prism will produce articles about hemianopia and, separately, articles about prism. You can also search by author.

Suggested Terminology

Use terms including visual midline shift, abnormal egocentric localization, dorsal and ventral processing, and midbrain systems. Cite well accepted articles and articles that reflect the current thinking.