

FRIENDS OF NVT

OFFICIAL NEWSLETTER OF INNEURACTIVE



INTRODUCTION

Welcome back to Issue 3 Volume 7 of the Friends of NVT Newsletter! In the main portion of today's newsletter, Dr. Joseph Clark discusses Inneuractive's CI-1, CI2-, and CL-3 trainings.

In our "How To" this week, author Jon Vincent provides methods for using the phoropter to assess and quantify ACA reflex!

We encourage you all to leave questions and/or comments below. Thank you for the continued interest and enjoy!

If you missed an issue, please visit <https://inneuractive.com> where all issues are available for free. Please tweet and share with your friends as we plan to release more great content. @FriendsofNVT.

WHAT'S IN OUR LATEST ISSUE:

- Introduction
- Inneuractive's CL-1, CL-2, and CL-3 training - Dr. Joseph Clark
- How to: Using Phoropter to Assess and Quantify ACA Reflex- Jon Vincent
- Announcements
- Disclaimer



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Inneuractive's CL-1, CL-2, and CL-3 training

I was recently chatting with some Optometrists who managed traumatic brain injured patients who were doing vision training. I found out that most Optometrists train their own vision therapists and tend to hire Occupational Therapists to learn the vision training. Apparently, there is a relative lack of standardized vision training programs to do NeuroVisual Training (NVT) or vision training methods to assist Optometrists. Optometrists are often associated with NVT or vision training for traumatic brain injury (TBI), Sports Performance, Learning disabilities and others. Without a standardized and validated level of NVT training, the vision trainers in these various offices may have widely differing skill and experience levels.

Inneuractive's (www.inneuractive.com/neuro-visual-training/) has three levels of targeted NeuroVisual training and Certification programs. Certification Levels (CL) are CL1, CL2 and CL3. Each level builds on the other. Inneuractive's three levels of certification training programs are designed to progress the NeuroVisual Training Student through the stages of NeuroVisual Training principles. Upon completion of each of the 3 training programs the student will be issued a certificate of completion. Classes can be remote or in person.

CL1 training is about 36 hours of training.

Introduction to CL1. Inneuractive's instructional course called CL1 is an interactive lecture series with practical demonstrations focusing on NeuroVisual training (NVT) methodologies. The lecture series, includes hands on training, is designed for sports medical and health care professionals with an interest in learning NVT methods. NVT evaluation and training methods are taught in the lectures and demonstrated in the practical sessions.

The Focus of the CL1 training. CL1 is focused on training the student to do Neuro Visual oriented assessments and training. We believe that learning the assessments and the significance of the assessment results helps guide the NVT trainer when doing NVT training with a client or patient. This helps them when doing NVT for performance enhancement. Therefore, training methods are focused on with an understanding of the testing methods.

Skills learned in CL1. Students learn a host of training methods including Brock String, Hart Charts, Saccadic eye movement, Near Far, Pitch and Catch methods using Marsden balls and Squarkle, Colored batons, Dynavision Light Board, Wacky Ball, Gaze Stabilization, Thumb Thing, Bates Field Splitters, Spatial Reasoning, Tachistoscope, Eye Discipline, Eye Dominance, Stroop and others.

Upon Completion of CL1. When a student has completed the CL1 class he/she will be able to work independently as a team member doing NVT for performance enhancement as well as performing baseline assessments. He/she will also be able to participate in doing rehabilitation under the direction of a rehabilitation specialist who will direct the care. Please note Inneuractive will be training individuals to CL3 levels and said individuals are expected to be able to direct rehabilitation oriented NVT. So, continuation of education is available.

CL2 training is about 40 hours of training.

Introduction to CL2. Inneuractive's CL2 class will focus on Inneuractive's validated baseline series. The students will learn all the tests employed in the baseline panel. Information concerning Inneuractive's baseline can be found at www.inneuractive.com/publications/. The student will learn how to do the tests, how to score the tests and how to read the scores. They will also learn how to record and read our quantitative grading system to aid in understanding the significance of the test results. The students will learn our grading methodology and how to use it as part of an intake baseline. The baseline will be explained and used for assessing ready to play and to design performance enhancement plans on a team wide and or individual basis.

The Focus of the CL2 training. The CL2 training program will focus on the role of the NeuroVisual tests in the baseline panel and the wide-ranging brain related information obtained from the tests.

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Nothing in this communication should be construed as a practice of medicine, an endorsement, or political action. The opinions are the opinions of the authors.

There will also be instruction on how to troubleshoot the tests and corollary tests that can be employed as part of a performance enhancement or a TBI tool. We will focus the education on making the CL2 graduate a valuable team member having mastered the skills related to the baseline and the NVT methods. The rationale for focusing on the quantitative baseline tests is the tests are important means for monitoring the progress of NVT clients and indicate the NVT methods appropriate to designing therapy and performance enhancement.

Skills learned in CL2. A major skill that will be taught in the class is how to read the baseline tests as well as performing the tests. This will include how to read the tests from an individual as well as for a team. The CL2 student will also gain knowledge related to reading the results of the tests for an athletic team and be able to apply said reads in designing a team based NVT program. The reads are a central skill that will be useful for gaining a deeper understanding of the NVT needs for performance enhancement as well as TBI rehab.

Upon Completion of CL2. When a student has completed the CL2 class he/she will be able to use the baseline tests and the whole baseline tool as a valuable information adjunct to performance enhancement as well as TBI management. He/she will be able to document and communicate said findings in a clinically relevant and quantitative way such that other team members will be equally able to use these results to aid in the goals for that athlete, team, or patient. The CL2 certified student will be able to design and progress NVT for performance enhancement and TBI patients. The CL2 training will elevate the utility of the CL2 student by giving him/her a valuable skillset that has broad sports and clinical application.

CL3 training is about 40 hours of training.

Introduction to CL3. Inneuractive's CL3 is a self-contained educational program that will teach practitioners of NeuroVisual Training (NVT) to test, rehab and help manage post traumatic brain injured (TBI) patients. The CL3 trained specialist will be able to perform neuro oriented NVT tests to aid in diagnosis and progression of rehab and be part of a team caring for and treating the TBI patient. The student will also be able to participate in NVT baseline assessments for sports or TBI and make meaningful interpretation of the results of said exams.

The Focus of the CL3 training. The CL3 training program will be an extension of the CL1 and CL2 programs but advanced to focus on NVT as appropriate to the TBI patient and / or advanced NVT for performance enhancement. We will focus on tests and training modalities commonly used to assess NeuroVisual deficiencies in the TBI patient. The student will learn how to do the tests, document test results, interpret the tests, implement NVT targeting deficiencies that have been identified and report the results of the tests and training. He/she will also learn how to manage CL1 and CL2 certified trainers for performance enhancement and TBI oriented NVT.

Skills learned in CL3. The CL3 student will have a broad understanding of the relationship between deficiency and treatment needed. Students learn advanced NVT methods. While there may be repeats in some methods from CL1 and CL2 the methods will be advanced to include troubleshooting, identifying mechanisms for deficiencies and a deeper understanding concerning their use and the results obtained. Some of the advanced methods to be acquired are eye hand retinotopic mapping for localization and memory, OKN for direction and cortical tracking, closed eye turns to localize canal dysfunction, and methods to aid in fusing the visual image. The students will also be educated on good monitoring techniques by observing the tests for good performance and recognition of deficiencies.

Upon Completion of CL3. When a student has completed the CL3 class he/she will be able to assess a TBI patient for NeuroVisual deficiencies, identify deficiencies and recommend treatments. He / she will also be able to design and manage the progression of performance enhancement training being performed by CL1 and / or CL2 personnel. Of note, it is assumed that CL3 trained individuals will work with physicians who will oversee and approve treatments and recommendations by the CL3s. As an educated CL3 practitioner the CL3 graduates will be able to become valuable members of clinical teams diagnosing, treating and managing the TBI patient or performance enhancement team.

For more information concerning Inneuractive's CL training programs [click here](#).
Check out the photos of some of our recent certification recipients (www.inneuractive.com/neuro-visual-trained-specialists/).

“How To” – Using the Phoropter to Assess and Quantify ACA Reflex

The phoropter is an ophthalmic or optometric device, commonly used by eye care professionals during routine eye examinations. It contains different lenses used to refract light entering the eye during sight testing and is most notably used to measure an individual's refractive error to determine their lens or contact prescription. The phoropter may also be used to assess measures of binocularity, such as phorias. The phoropter is also used throughout our NeuroVisual Training program as a modality to exercise the extra- and intra-ocular muscles. We've discussed several of these uses in depth in our Friends of NeuroVisual Training Newsletter Issue 1, Volume 5.

Another, albeit lesser-known use of the phoropter –

one that we use quite often during neurocognitive baselining and assessments – is to quantify an individual's Accommodative-Convergence Accommodation (ACA) reflex. We have discussed the ACA reflex previously in Friends of NeuroVisual Training Newsletter Issue 3, Volume 5. However, for a brief background, the ACA ratio is a neurological reflex that defines the relationship between the amount of convergence (in-turning of the eyes) that is generated by a given amount of accommodation (focusing effort). The key to this is that is a neurological reflex, and thus cannot be faked, or “sandbagged”, so it is an essential tool in a neurocognitive baseline.

The ACA reflex is measured by assessing

the horizontal phoria at 14 inches (with corrective lenses in if used for up-close reading). The result is a phoria as assessed and reported as “eso” (eyes deviated inward at baseline) or “exo” (eyes deviated outward at baseline). Next, the horizontal phoria test is repeated but with a +1 diopter added (termed horizontal phoria +1). This added +1 diopter forces the eyes into a slight outwardly deviated position (“exo”). The results are reported as “+” for “exo” or “-” for “eso” following the added +1 diopter. Our results suggest that a normal ACA is about +4 to +6.

Announcements

The Department of Defense (DOD) Vision Research Program (VRP) and Vision Center of Excellence (VCE) will co-host a Vision Injury Research Forum (VIRF) on April 7, 2023.

Author Dr. Joseph Clark, PhD was recently interviewed on a podcast addressing the gap in care following a stroke. Listen to the episode here: <https://recoveryafterstroke.com/addressing-the-care-gap-after-stroke-dr-joseph-f-clark/>

As always, if you're interested in learning more about Inneuractive our mission, our products and service offerings, or just Neuro-Visual Training in general, please click the following link: www.inneuractive.com.

Have suggestions for a future issue? Please reach out to clarkjf@gmail.com or info@inneuractive.com and we will do our best to include your request in the future.

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