

# **OASIS Clinic for Neurophysiological Wellness**

## **An Introduction**

18.July.2019

The OASIS Clinic for Neurophysiological Wellness is a center for integrated clinical treatment and research, including clinical trials, focusing upon several closely-coupled neurological and psychological disorders, diseases, and symptoms. OASIS Clinic has been established by a team of professionals in medicine, psychology, and the life sciences, with partners and associates in other fields of physical, computational and social sciences.

The Clinic embodies and delivers services to patients and healthcare providers in multiple venues and formats based upon a unique paradigm model of rehabilitative and restorative therapy in healthcare, implemented within its system of medical and behavioral services. The OASIS model employs individual, family and social consultation and analytics which enable design and delivery of a personalized and adaptive plan and regimen for treatments in all healthcare modalities, spanning from pharmaceutical to orthopedic/fitness to individualized methods incorporating fine arts, performance arts, and social interactions, for persons experiencing a variety of neurological and psychological conditions and life-changing situations.

OASIS Clinic services including all therapeutic procedures are designed to provide maximal optimization and adaptability for patients, families, providers and care-givers. Treatments are delivered, through use of a system of evaluative consultation that incorporates professionals and intelligent computational systems, by provider-members of a set of the most appropriate centers of medical and behavioral science excellence, worldwide, each of which is recognized and appropriately validated professionally for the range of neurophysiological health conditions that are the focus of OASIS Clinic.

OASIS Clinic operates presently with several leading institutions and does not provide direct onsite clinical services. Progressively, over time, the Clinic plans to establish multiple sites, worldwide, at which a variety of pre-treatment consultations and therapeutic services will be delivered, by members of OASIS Clinic staff and professional partners in the OASIS Network of hospitals, clinics and specialized centers.

## Areas of OASIS Clinical Focus

Note: OASIS Clinic is focused upon rehabilitation and restorative medicine and behavioral sciences. Patients include individuals with chronic disorders and diseases, including consequences of injury and infection. Immediate life-threatening conditions are provided before contact with OASIS Clinic, through the normal and usual process of medical response and treatment.

There are two broad categories of clinical focus, and each element within each “neuro” category is very closely related, etiologically and therapeutically, with one or more elements in the “psych” category. Thus, OASIS Clinic, with its emphasis upon “whole organic person and society” thinking and scientific practice, includes the neurological and psychological aspects as essential components of both dis-ease and health, both dysfunction and wellness.

### Neurology

- Autoimmune and autoimmune-related disorders and diseases, especially
  - Multiple sclerosis
  - Dementia including Alzheimer's disease
  - Parkinson's disease
  - Chronic pain and fatigue
  
- Brain injuries, especially
  - Stroke
    - Traumatic brain injury
  - Drug-overdose trauma
  - Infectious disease debilitation

### Psychology

- Anxiety-stress disorders
- Depression including depression-related self-abuse pathologies
- Post-traumatic stress disorder
- Addictive behaviors including narcotics, nicotine, alcohol abuse and eating-related disorders
- Autism and related social-communicative dysfunctions

The work of the OASIS Clinic may be summarized as being in two broad and closely-related areas of healthcare and wellness practice:

- Neuro-orthopedic rehabilitation and restorative therapy (Neuro-Ortho or “NORTH”)
  
- Neuro-social-communicative rehabilitation and restorative therapy (Neuro-Social or “SOUTH”)

### Succinct statement of Clinic Functions

The intelligent optimization, control and adaptation of a person's and family's health and wellness program in the focal areas of neurological and psychological treatment, working in close coordination and partnership with a select international team of leading specialist providers and institutions.

### **Therapeutic Specializations**

Diagnostic, prophylactic and therapeutic methods including the following, considered as five classes of synergetic methods. These are delivered/performed by members of the OASIS Clinic Network, all of whom are regarded as specialists and experts in their field but possessing also important qualities of generalism, wholism, and innovation receptivity:

- ◆ Cognitive and Memory exercise and fitness, particularly those making use of both mental and physical (hand-eye) functions
- ◆ Physical exercise and fitness including orthopedic therapies and exercises involving principles derived from traditions such as Tai Chi, Yoga, Shaolin
- ◆ Nutrition and Diet including therapies focused upon avoidance and remission of obesity, anorexia, bulimia, and non-specific other bad dietary habits (e.g., overconsumption of processed foods, sugars)
- ◆ Electromagnetic therapies including TMR, TMS, PBM, including the use of TMR in particular for both open and non-open wounds from injuries and repetitive adverse bodily movements, posture, and other actions
- ◆ Art, Dance, Drama, Music, Nature, Writing therapies, including (as examples)
  - drawing, painting, sculpture and clay modeling
  - improvised ballet, Eurhythmy and mythic-theme dance
  - ancient Greek and mythological drama
  - classical, folk, jazz, blues, contemporary, and specialized “Orff Instrument” practice
  - gardening, hiking, collecting (shells, gems, rocks, butterflies), canoeing, sailing, fishing
  - fiction, poetry, and autobiographical journal compositions

In each of these areas, the practices are facilitated and led by master craftspersons who are also trained and experienced in the psychophysical therapeutic aspects of their work, using “master-class” formats in many instances

- ◆ Psychoanalytics (focus on Jungian and related methods/schools)
- ◆ Individual and group analytical dialog
- ◆ Pharmaceutical treatments and regimens as deemed appropriate by providers to supplement the above other methods

## Areas of OASIS Research Focus

Note: OASIS Clinic is not a primary research center but includes research activities as part of and through its clinical service operations. These include clinical trials and clinical-type experiments. These also include computational and mathematical research. Most research activity that is directly connected with topics that pertain to OASIS Clinic interests are performed through and by means of two general venues:

- The TETRAD Institutes (specifically, PRIMUS, OASIS, MIRNOVA, and ASTRA)
- Other centers including universities, specialized centers, and companies

The main area of research interest and activity are:

- Integration of clinical treatment with brain functional network and connectome models – principally employing diagnostic systems such as MRI, MRE, MRF, EEG, MEG, fMRI, SMD, EROS, fNIRS, VNT (see Figure 1 below)
- Bio-electromagnetics for physio/psychological healing including wound healing that may encompass more than strictly neurological injuries – principally TMR, TMS and PBM (see also Figure 1 below)
- Origins, avoidance (prophylactics) and treatment (therapeutics) of autoimmune disorders and diseases and also inflammatory pathologies originating from both traumatic injury and infectious disease

More information on research focus is in other documentation as well as many published papers available for reading and reference.

Figure 1 – Selective Neuro-physio-psych Technologies Summary (June, 2019; not inclusive)

Technologies and protocols listed here may be considered in terms of the following application areas and implementation/use constraints:

D = Diagnostics (including imaging and other “data collection”)

P = Prophylactics (preventive treatments, here taken to mean for “at-risk” populations who have certain symptoms) – either “direct” through outcomes of the procedures, or indirectly through gaining information

T = Therapeutics (the patients have been definitely diagnosed with a particular condition (e.g., one of the 4 categorical forms of MS) – principally through the “direct” use of the procedures)

R = Research (this includes subjects who have none of the relevant neurological disorders)

TMS (both “repetitive/variable-layer” rTMS and “deep-layer” dTMS)	P T R
fMRI (Functional MRI)	D P R
EEG	D P R
MEG	D P R
PBM (Photobiomodulation) and NIR (Near Infrared Light)	P T R
Bioelectromagnetics (other types incl. non-cranial, non-neurological)	T R
MRE (Magnetic resonance elastography)	T R
EROS (Event-related Optical Signal)	D P R
fNIRS (Functional Near-Infrared Spectroscopy)	D P R
VNT (Vision-based Neurotherapeutics, including computer-based systems employing VR and AR (“virtual and augmented reality”))	D T R

Figure 1 – Selective Neuro-physio-psych Technologies Summary (June, 2019; not inclusive)

## OASIS Seminars, Workshops and Group Consultations

The seminars and workshops, based upon the model of the TETRAD Seminars, which are designed and administered by the Clinic's close partner, The TETRAD Institutes, and the group consultations (a special format of workshops) constitute a series of events designed for the following participant groups:

- Healthcare professionals, mainly physicians, nurses, and direct neurological, orthopedic and psychological providers of therapeutic services
- Combined audiences of the aforementioned type of professional plus patients who are attending special events that integrate education with clinical consultations and treatment events, including clinical experiments and trials.

**Seminars** are 2 to 4 day events for clinicians and researchers, generally involving from 12 to 25 participants, sharing work and results and with a focus upon direct teaming among members of the seminar participation group. Participants engage in multiple seminar sessions that involve presentations and extensive open group discussions. Generally, some of the participants are already collaborating with others in the seminars or else looking forward to the prospects of such ongoing collaborations that will continue after the seminars.

**Workshops** are 3 to 5 day events for clinicians and researchers, generally for the purposes of mutual sharing and learning of techniques used in both instrument-based, pharmaceutical-based, computer-based, and arts-based therapies, as well as research practices and technologies. These may consist of one or more “master classes” conducted by one or more experts in the different techniques of treatment and/or research. Usually the workshops have multiple SME leaders and facilitators for the sessions. All are very much “hands on” and may include volunteer subjects where human subjects are necessary for demonstration and training. Generally, all workshop attendees are in some manner familiar by education or experience with what is being presented and taught in the workshops. Attendance is also in the range of from 12 to 25 participants.

**Group Consultations** are very similar to the workshops, with the main difference being that they are designed to provide opportunities for patients and select interested and appropriate other individuals to learn about new therapeutic practices and techniques and in the process, for specific selected patients, to participate in multi-provider customized treatments. These are generally conducted for individual patients by individual specialists or team specialists, and if instrumentation is involved, it has been brought to the event site by the provider(s) or their institutions or select companies. Attendance may vary with generally 3 to 7 providers plus assistants, and usually 8 to 25 patient-participants. Durations may vary from 2 to 6 days depending upon scheduling of the different procedures.

### Subject matters of the Seminars and Workshops

The primary focus is on the areas defined and more detailed above as OASIS Clinical Focus, and particularly:

- Cognitive and Memory exercise and fitness
- Physical exercise and fitness including orthopedic therapies
- Nutrition and Diet
- Electromagnetic therapies including TMR, TMS, PBM

Art, Dance, Drama, Music, Nature, Writing therapies

### Subject matters of the Group Consultations

The primary topics and treatment sessions include:

Electromagnetic therapies including TMR, TMS, PBM  
Physical exercise and fitness including orthopedic therapies  
Art, Dance, Drama, Music, Nature, Writing therapies

## **OASIS Clinical Network**

The Network consists of those individual healthcare providers and practitioners and institutions who are engaged in the processes of evaluation, assessment, recommendation and treatment delivery for patients and families served by the Clinic, and/or in collaborative research with and through the Clinic.

Professional individuals will typically be MD, DO, NP, RN, PhD, MPH persons, many of whom are also holding positions in hospitals, clinics, universities, and appropriate healthcare companies.

Network Members engage in a contractual relationship with OASIS Clinic and each contract specifies all terms on an individually designed basis for each Member.

A major emphasis is placed within OASIS Clinic upon wholistic thinking and philosophy as embodied in the practice of full-breadth, full-service medicine and specialization skills and experience in areas such as:

Electromagnetic therapies including TMR, TMS, PBM  
Art, Dance, Drama, Music, Nature, Writing therapies  
Physical exercise and fitness including orthopedic therapies

## **Clinical Service Process**

The basic process for any individual and family groups (e.g., patient and family members) coming to OASIS consists of the following:

1. Interview discussions regarding the patient and issues
2. Review and assignment to a specific professional member of the Network
3. Evaluation and assessment including further interviews and discussions with patient and current providers, and optimally also with other relevant persons such as family members and associated therapists
4. Recommendations of an OASIS Clinical Plan for the patient
5. Approval of the Clinical Plan by all appropriate persons and entities
6. Finalization on a contract basis including full review of financial arrangements including insurance coverage authorizations (all of which are, at least initially in OASIS Clinic development, handled purely and exclusively by and through the various Network members that will be providing actual services)
7. Commencement of the Clinical Plan execution

## Contact Information

OASIS Clinic for Neurophysiological Wellness is established in the United States and the European Union. Founding Network members are in Michigan, New York, Texas, California, Canada, United Kingdom, Netherlands, Germany, Russia and South Korea.

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