



# News, Facts and FAQs

**Pertaining to  
TETRAD Institute (TI) and Intelligence Renaissance Industries (IRI)**

version 1.2    19.November.2019 (updated 02.June.20)

## Table of Contents

Programs and Projects.....	2
Business and Partnerships.....	4
Endowments.....	5
Investments.....	5
Contracts.....	5
Internship and Volunteer Programs.....	5
Special Events.....	5
Contacts.....	7

## Programs and Projects

### TI

TETRAD Institute is focused upon basic and fundamental research and also direct applications of the results from such research. There are two (2) Centers – Primus and Astra – and there are seven (7) ongoing long-term Programs and within these are nine (9) Projects which are mutually supportive.

#### Programs and Projects

**RTD** (Reflexive Topological Dynamics) – fundamental theoretical physics. The Program includes two principal Projects: Teranod (controlled compact fusion power generation) and Cygnus (low-energy non-ballistic particle physics). (principal websites: PRIMUS Center, [www.primus.tdyn.org](http://www.primus.tdyn.org))

**TBD** (Topological Biomolecular Dynamics) – theoretical and applied biophysics and molecular/cellular biology. The Program includes one principal Project: ICMC (Immuno Cyto Molecular Computation/Communication). (principal websites: PRIMUS Center, [www.primus.tdyn.org](http://www.primus.tdyn.org))

**NeoPlexus** – development of a Generalized Heterogeneous Computing Machine architecture and implementation. This involves direct application of RTD theory and other research including in neurobiology to computer science and engineering. This work is focused upon the design and experimentation of a topological information resonance architecture that implements a non-Turing-machine form of quantum computing. The Program includes the GHCM Project. (principal websites: PRIMUS Center, and IRI, [www.iri.tdyn.org](http://www.iri.tdyn.org)).

**ERA** (Earth Renaissance Action) – a dual-project program in cybernetics and environmental monitoring and control and the use of coordinated networks of autonomous and semi-autonomous robots and sensors in terrestrial and space operations. These include the ASTRIC and TETHYS Projects. The fundamental control systems are based upon GCM theory, architecture, simulation and future implementations. (principal websites: ASTRA Center, [www.astra.tdyn.org](http://www.astra.tdyn.org))

**PSED** (Psychosocioeconomic Dynamics) – direct application of RTD theory and GCM computing models and algorithms for mass-population predictive analytics and event forecasting and for social and psychological health, wellness and rehabilitation applications. This Program includes the OASIS and SELDON Projects. (principal websites: TETRAD Institute, IRI, [www.iri.tdyn.org](http://www.iri.tdyn.org), and EcoVita, [www.ecovita.tdyn.org](http://www.ecovita.tdyn.org))

**LIBRARIUM** – design, construction and support of digital and physical library resources for the conservation, preservation and sustainable open and universal availability of critical STEM, arts and humanities knowledge resources for the long-term benefits of civilization. The Program includes the MIRNOVA Project in Education. (principal websites: TETRAD Institute, IRI, and EcoVita).

**COADUNATIO** – The Program consists of the preparation, delivery and content dissemination of the TETRAD Seminars. (principal website: [www.seminars.tdyn.org](http://www.seminars.tdyn.org))

## IRI

The company, Intelligence Renaissance industries (IRI), is focused upon research, product development and commercialization emerging from four of the TI Programs and several of their Projects:

Long-term activities within IRI include:

- ◆ NeoPlexus Program and the physical implementation of the GHCM, a molecular-based non-Turing computer, employing quantum-theoretic operational principles, capable of learning, recognizing and inventing complex patterns of information through a neurobiologically-based architecture. (GHCM Project)
- ◆ PSED Program and its applications for social communications and intelligence development, through the OASIS World system, a commercial implementation of internet-based, augmented-sensory experiential environment providing users with communications, collaboration, education, entertainment and trading (COMET). This includes products and services for personal and business cybersecurity (Kyberos/Kybernet) enhancing personal and social health and rehabilitation that are delivered through the principally the OASIS product (aka OASIS-World or “Terra”). (OASIS Project)
- ◆ PSED Program and its derivative applications for mass-population predictive analytics and event forecasting, through the Seldon System, a commercial implementation of the PSED mathematics and computational sciences. (Seldon Project)
- ◆ ERA Program and its cybernetics and control systems, through the CYBOT robotics product family, consisting of design, deployment and mass-market services with compact, personalizable robots for consumer and business applications. (ASTRIC and TETHYS Projects)

Shorter-term activities within IRI are based upon OASIS, the primary product, the social environment, and its components which include:

- ◆ MedAtrium: mobile medical diagnostics and analytics laboratory, focused upon infectious contagious diseases
- ◆ Eyrie: medical informatics, analytics, prediction and resource management system
- ◆ BioProt: antimicrobial surface and material bioprotection
- ◆ VESID: antiviral prophylactic and therapeutic medicine

Prior activities linked with IRI and now absorbed, reshaped, and applied to current IRI business and product focus include:

### **EcoVita**

the development and operations of the public commercial, educational, and entertainment center, the EcoVita Nature Park, and affiliated businesses serving both onsite visitors and online customers, with mass-market consumer/visitor offerings that include components and derivatives of technologies developed by IRI and TI directly.

### **Oasis Clinic for Neurophysiological Wellness**

Oasis Clinic for Neurophysiological Wellness (OCNW), is now incorporated into IRI and within Eyrie and MedAtrium, both the physical (onsite) and digital (online) versions thereof, and it is focused upon the application of current and newly emerging diagnostics, therapeutics, and preventive methods for serving people's needs in a broad range of neurological, psychological and related systemic issues.

## **Business and Partnerships**

You are encouraged to visit each of [www.tdyn.org](http://www.tdyn.org) and [www.intelrenaissance.com](http://www.intelrenaissance.com)

TETRAD Institute and IRI are prepared to enter into negotiations relating to acquisitions (purchases, leases) and partnerships in the following topics:

Serving all four entities together:

#### Land (real estate) acquisition – North America and Europe

This location, the “Estate”, will provide the building(s) and land for the main headquarters and all physical facilities for the Institute and the Alliance Partners.

In addition, there is the initiative to acquire the Danish registry sailing ship “Zar” (a classic 42m three-masted wooden schooner) for dedicated use as the European operational base for all Institute and partner activities and in particular for the TETRAD Seminars and for Oasis Clinic functions serving Europe.

For IRI, consideration is focused upon an office and laboratory suitable for its activities, with ample opportunity for expansion. These requirements fit within the scope of the common space described above and include:

- Physical facility – a portion of the common space described above
- Instrumentation
- Personal and family consultation and education programs
- Laboratory analytical services

## **Endowments**

TETRAD Institute has prepared a substantial endowment plan based upon private sponsors and donors. There is a funds development plan for growing the Endowment fund and for the acquisition and sustained management of the physical main facilities and all informational and research resources. There are specific project needs and opportunities for short-term and long-term sponsorship. TI welcomes interest by others for making contributions, donations, and grants for its work.

## **Investments**

IRI is being privately funded at present, with plans for corporate, foundational, and public funding. IRI is receptive to discussions with parties interested in becoming investors in one or both companies. IRI is privately funded and is in the market for additional long-term financial partners.

## **Contracts**

IRI offers significant opportunities for a wide range and variety of business partners. The company welcomes discussions with potential providers of products and services. In addition to opportunities listed above, there are opportunities for businesses that can provide subcontractor services that meet the needs of the organizations.

## **Internship and Volunteer Programs**

TI and IRI both presently offer opportunities for internships and volunteer activity. These are available for persons in high school, university, and post-education situations. Engagement terms are highly variable and flexible. There are opportunities for both onsite in the main operational base and potentially elsewhere, and also through online participation. In most cases stipends and compensation for expenses are provided.

## **Special Events**

Tetrad Institute has a special scientific conference series known as the TETRAD Seminars (these constitute the COADUNATIO Program of the Institute). These have four varieties, each with a focus upon the themes central to each of the two Institute component centers and the Institute as a whole:

**TETRAD PRIMUS Seminar** – physics, mathematics, complex systems and the interests of the PRIMUS Center.

**TETRAD ASTRA Seminar** – space sciences, robotics, environment, cybernetics and the interests of the ASTRA Center.

**TETRAD MIRNOVA Seminar** – education in science, technology, engineering and mathematics that is oriented toward agriculture, environment, and human social adaptation and sustainability to natural and social change and impact factors, with a focus upon practical training and career/vocation development.

**TETRAD OASIS Seminar** – issues and challenges in social communication, collaboration, community development, cooperative business development, and the incorporation of education, entertainment including gaming, and creative trading and other economic forms of social interaction.

The first of these, planned for late-2020, is the **TETRAD PRIMUS Seminar**.

Title: Topologies, Potentials, Process and Structure

Physical Dates and Locations:

Main Event: September 2020, 3-4 days onboard the sailing ship in Denmark (alternatively in Oxford, UK)

Satellite Location: USA (TBD)

This conference will focus upon the the integration of concepts, findings and current investigations in fundamental physics and the evolution of order, structure and complex systems, and specifically upon the work of the following indicated scientists and teams.

This conference will bring together several important and unique physicists, mathematicians and also neuroscientists, most of whom have not worked together with each other before, in a way that will enable a sharing of ideas and findings for a deeper and more unified understanding of fundamentals in physics and also relating to the life sciences, especially brain science.

The conference bring together 10-15 persons attending directly, physically, and with others present via internet. The conference events and results will be assembled into multiple documents and videos for sharing with different types of audiences including general-interest and pre-university student types.

The focus is upon the work of:

BJ Hiley, RE Callaghan, G Dennis, M Zych, C Brukner, I Pikovski, F Casta

Xiao-Gang Wen, A Khrennikov, A Tozzi, J Peters, E Deli, P Marijuan

G Calcagnia, M Ronco, J Wilkinson, G Lesovik, S Korotaev, J Beichler, O Granichin

and foundational, inceptional work by W Clifford, H Grassmann, A Kolmogorov, P Florensky, D Bohm, V Arnold, G Perelman, and others

The second of these, planned for late-2020, is the **TETRAD OASIS Seminar**.

Title: Oasis for Brain Understanding and Health

Physical Dates and Locations:

Main Event: October 2020, 3-4 days onboard the sailing ship in Denmark (alternatively in Oxford, UK)  
Satellite Location: USA (TBD)

This conference will focus upon the interface research and clinical application. This spans the links between between connectome models, the etiology of learning and memory and also cognitive dysfunctions, certain autoimmune disorders, and both neurodegenerative and neurorestorative processes. There are aspects pertaining to new diagnostics, pharmaceutical development, also non-pharmaceutical therapies, and the keywords here are integration, amplification and reinforcement of positive effects and reduction and elimination of negative consequences.

The intention is to cultivate constructive dialog and creative medicine, pharmacology and therapy, which can explain certain successes and prospects for success through intelligently applying and integrating what are seemingly diverse and often “not considered together” methods of treatment for diseases and conditions such as multiple sclerosis, dementia including Alzheimer's, stroke, traumatic brain injury, and depression.

Particular attention is directed within the space of autoimmune disease, MS, demyelination and the combination of reduced factors leading to onset and relapse, alternative approaches to countering immune system attack without countering or risking immune system capabilities, and in all of this, addressing the personal, interpersonal, and especially familial and community factors in these diseases and disorders.

Future planned Seminars include:

“Beyond TED there is ALICE” (TETRAD MIRNOVA and OASIS Seminars, combined)  
Girls, Boys, Women, Men, and Cultivating Social Intelligence that will Sustain Civilization  
2020, at the main TETRAD Institute facility in North America.

“Asteroid Reconnaissance, Intervention and Countermeasures – the ASTRIC Project: (TETRAD ASTRA Seminar)  
2020, location TBD. This is focused upon [www.astra.tdyn.org](http://www.astra.tdyn.org) and the specifics of the ASTRIC Project.

## Contacts

+1 (231) 492-8301 (Voice, SMS, WhatsApp, Viber, Telegram)

+1 (505) 926-1399 (messaging)

[contact@tdyn.org](mailto:contact@tdyn.org)

[martinjoseph@tdyn.org](mailto:martinjoseph@tdyn.org)

[rachelcereth@tdyn.org](mailto:rachelcereth@tdyn.org)

[makar.duncan@tdyn.org](mailto:makar.duncan@tdyn.org)

[martin.dudziak@gmail.com](mailto:martin.dudziak@gmail.com)