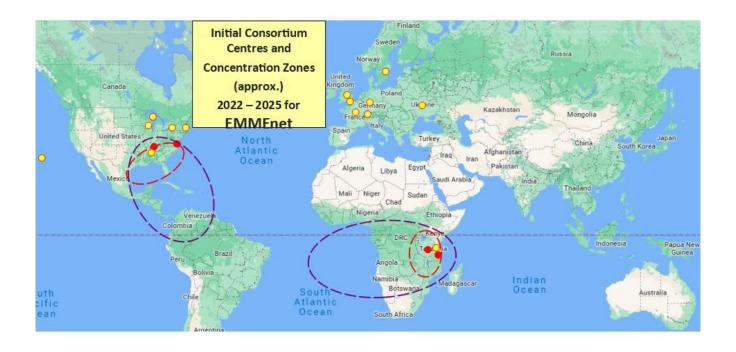
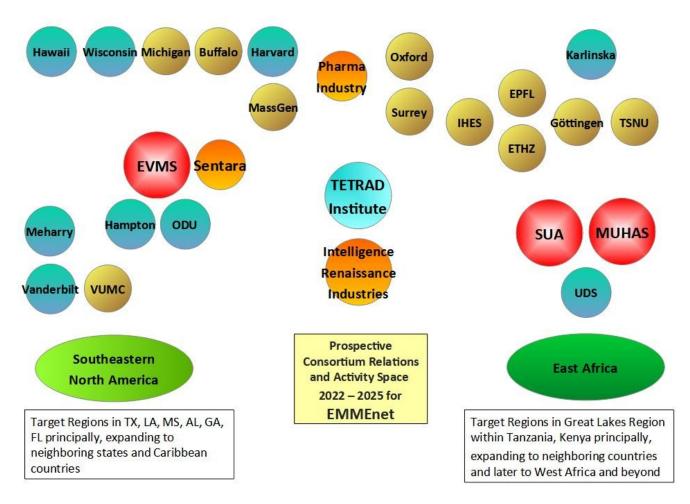
# EMME (EMMEnet) --- Ten Simple Graphics to Illustrate the main STEM and Project Scope

Friday 12.aug.22 (mjd)

These are intended as accompaniments to previous text-mainly documents and papers.



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# Synthetic Intelligence Communities operating in Social Computing and Communication Networks and producing Predictive Knowledge for use in Public Health and Social Sustainability

Seldon – the Prediction Engine

OASIS – Open Autopoietic Social Intelligence Synthesis (architecture, framework)

Oasis Terra – an OASIS-powered internet environment ("world")

PHIBER - Population Health Informatics Biomedical Equity (resource domain)

Martin Dudziak, PhD
TETRAD Institute of Complex System Dynamics

April.2022

# **EMMEnet**

# incorporates Seldon SI (synthetic intelligence)

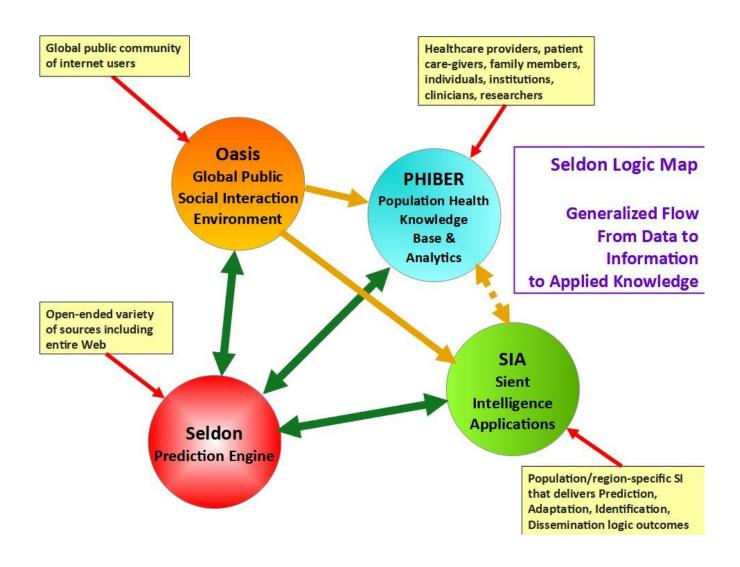
# Four Principles of Computer Science, Abductive Reasoning and System Application

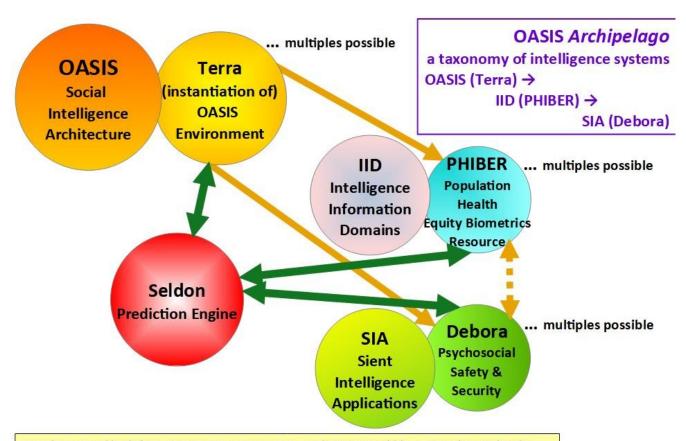
PAIR - Parallel Asynchronous Iterative Recursive

**HOMS – Hypothesize Observe Model Simulate** 

**EVEM – Experiment Verify Evaluate Modify** 

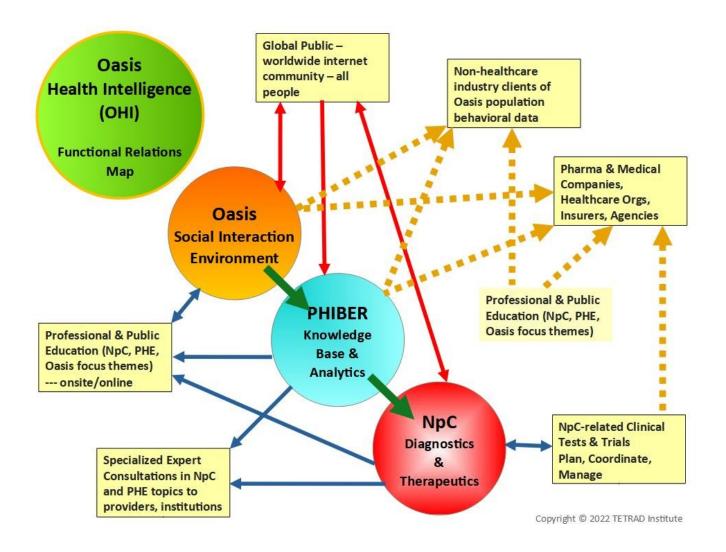
PAID - Predict Adapt Identify Disseminate

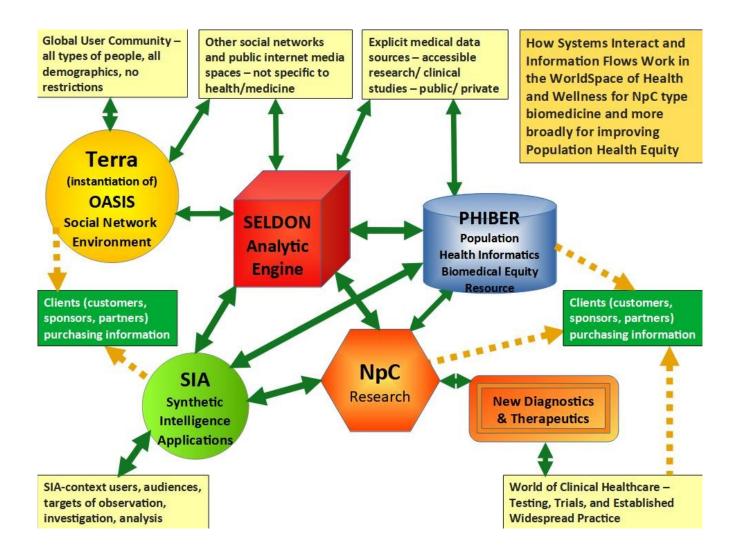




Based upon and built from OASIS core components, each Oasis World (e.g., Terra) provides the matrix for personal and interpersonal dataflow. This contributes (with many other data streams) to an IID (e.g., PHIBER) which has a domain focus (e.g., health). Together these work and work with SIA systems – applications such as Debora, each of which has a focus on a population type and specific attributes and their predictive (future-possible-likely) values.

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Social interaction framework (similar to Wordpress, FB, Twitter, LinkedIn, Tiktok, Baidu, generic CMS) ----

"Four dimensions" of UEX: Linear (basic: text, shared media) 2D (graphiucal) 3D (navigable) 4D (true AR - mixed RW + VW

## Terra (instantiation of) OASIS Social Network

Environment

### Oasis World architecture: **Function Modules**

(Core CMS Environment with plug-ins and interfaces)

- Communicating Dynamical Processes (CDP ← CSP)
- Network Computing
- Cloud and Mobile Services

navigable spaces)

(~ WhatsApp, Telegram, Zoom, Meet)

Communicate Collaborate/Meet

(~ Slack, Discord, Zoom, Meet, Team)

Educate (∼ WordPress, CMS / Wiki, WebMD)

Entertain (Games: Build, Play) (~ Roblox, Minecraft)

Trade (~ E-Bay, Amazon)

Open Street Maps

OpenSource GeoSpatial)

**OpenSimulator** (VR, AR)

Shares, Feeds, **Notifications** 

Mayo, NIH)

YouTube, Vimeo

Partner/Client Media/Promotions

**Public Sites** 

(~ WebMD,

OASIS
Autopoietic
Social Intelligence
Synthesis
(logic architecture)

 $TI \rightarrow IRI \rightarrow open-use$  by world

Terra
(social world
instantiation of)
OASIS

IRI → licensable to others

Seldon Analytic Engine

TI + IRI → licensable to others

PHIBER Knowledge System

TI + IRI → data contracts to others

SIA Synthetic Intelligence Applications

TI + IRI → data contracts to others

Who Builds What
In the world of
OASIS
Oasis Worlds like Terra
Seldon Engine
PHIBER and other IID
Domain-specific SIA
+ the medical world of NpC

Note that "TI+IRI" composite Includes formal project consortium members and partners

> NpC "+" Research

TI + IRI

→

products/licenses to others