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Presentation at SBGN-1 Workshop
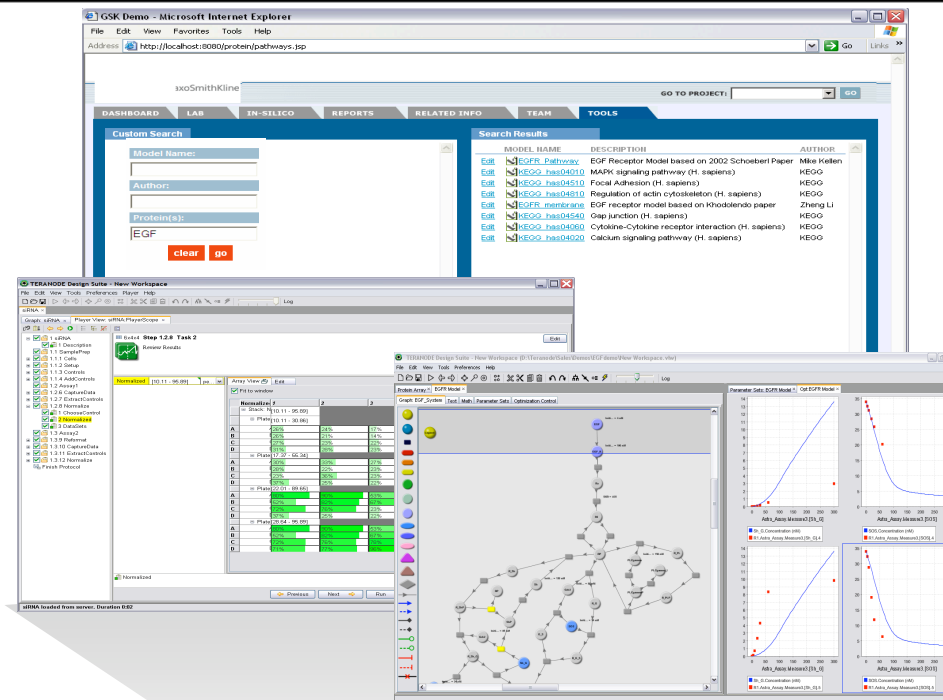**Zheng Li, zhengli@teranode.com**

TERANODE XDA Platform

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Web Portal

TERANODE
Design Suite

TERANODE
Model Server

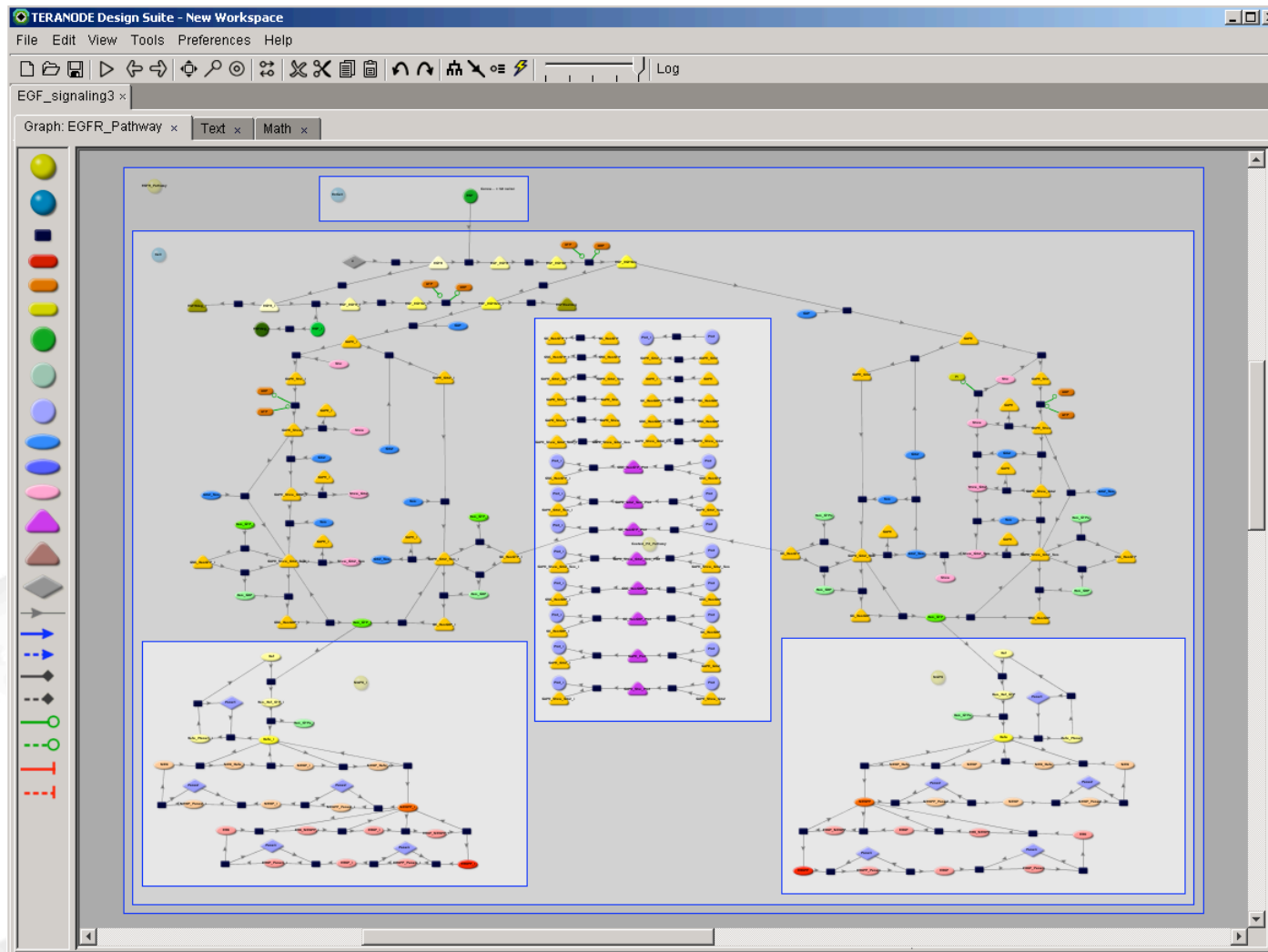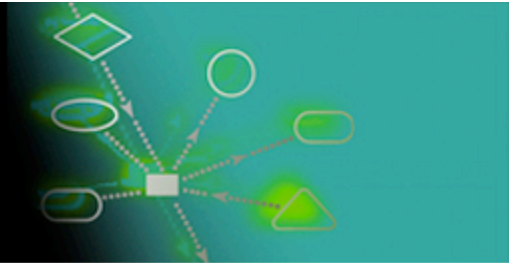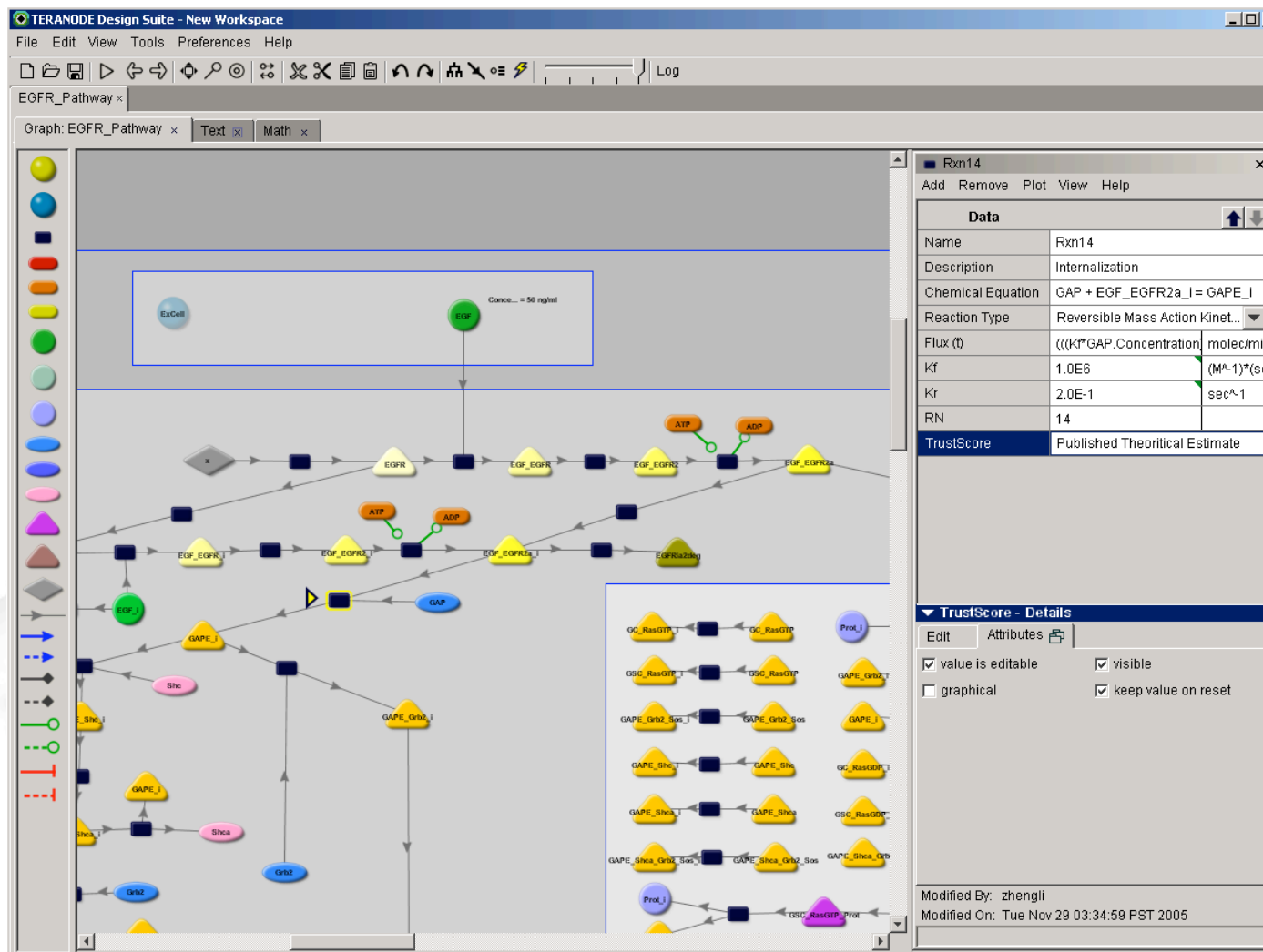Biochemical Networks

Experiment Data

3rd-Party Tools & Repositories

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View the full EGF receptor model

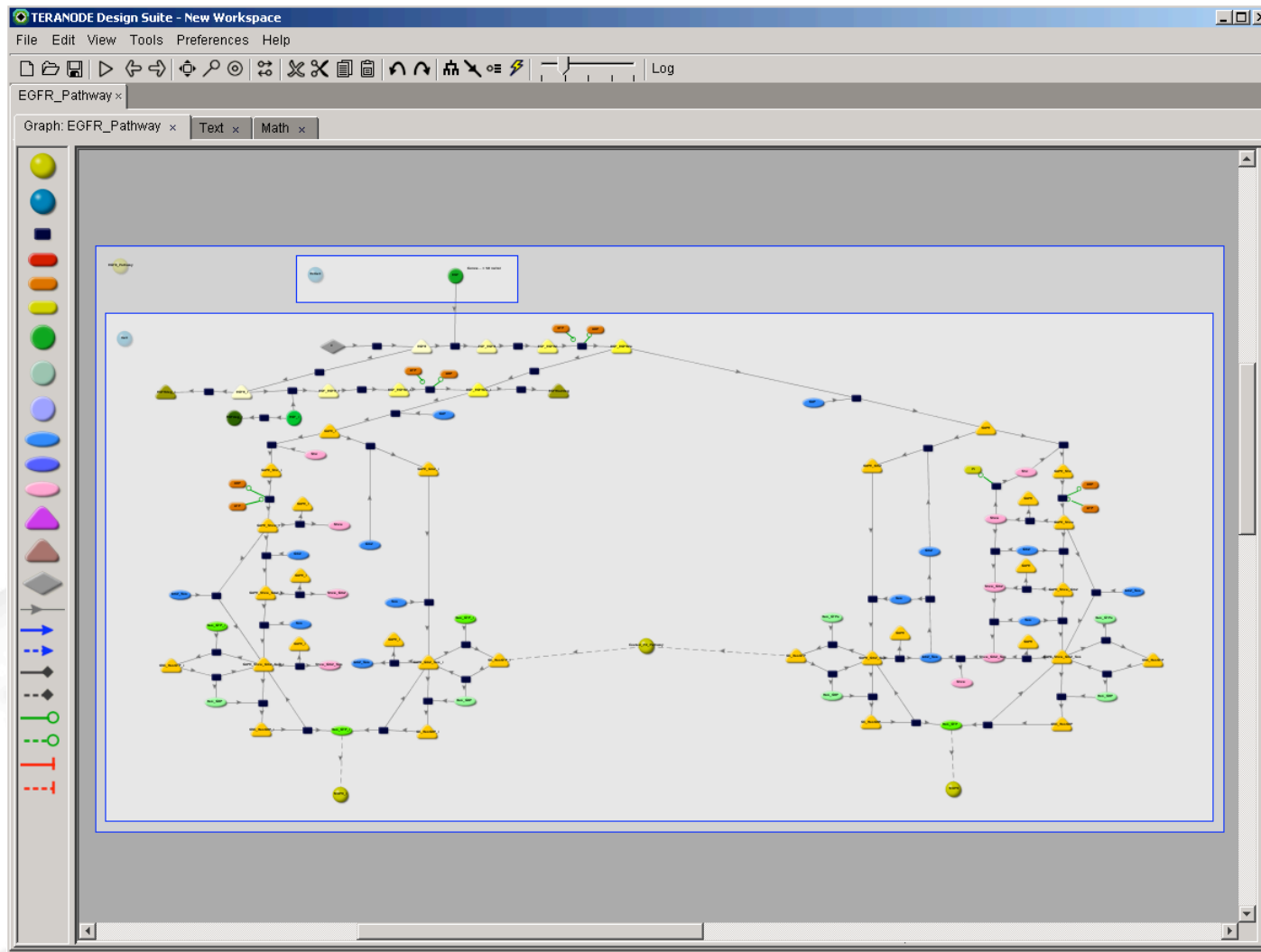# Zoom in on the detail

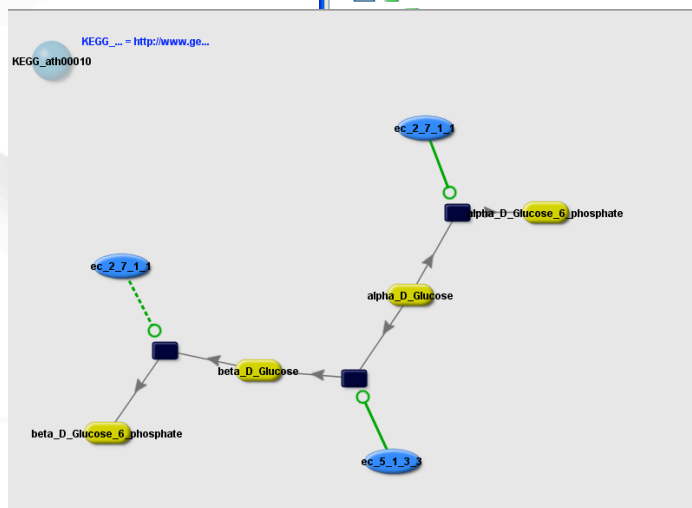Audit Trail

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Collapse and expand the hierarchy

VLX Graph accessed by MIT's Welkin Browser

VLX Graph

Load models from KEGG

VLX Object Model and Extensibility

GraphObject → Property

Edge   Node   Data   Method   View
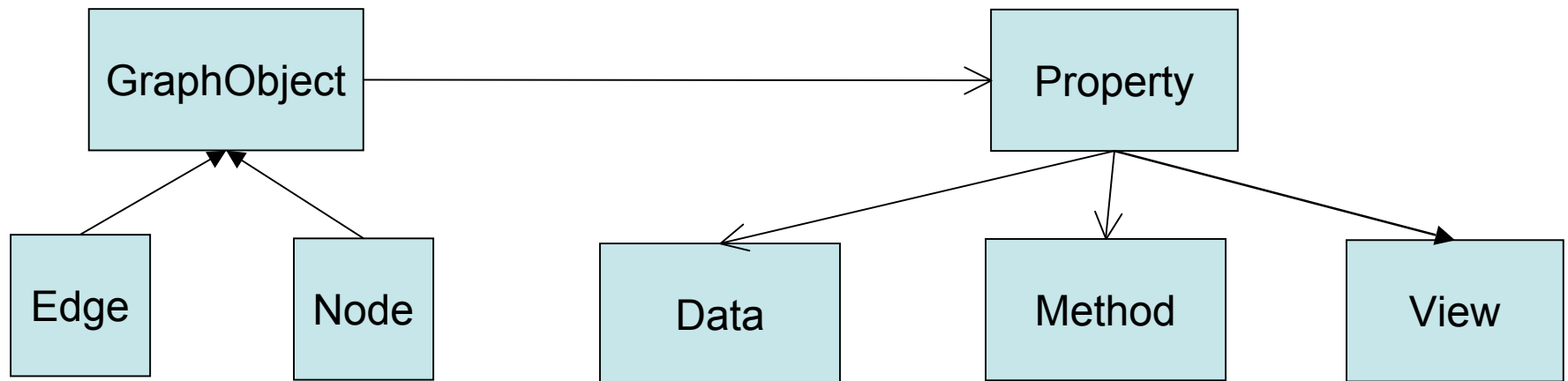
EGF

Add   Remove   Plot   View   Help

Data		
Name	EGF	
Description	Epidermal Growth Factor	
EntityType	Protein	
Gene	EGF	
MolecularWeight	6250	g/mol
Concentration (t)	8	nM
Note	Normal condition	

DataMap - Details

Edit   Attributes

Property to Map InitialConcentration
Scale   Linear

Min 0   molec/pL Auto ☑
Max 2.21E7   molec/pL Auto ☑

Apply

Concentration(t) - Details

Edit   Attributes   Plot
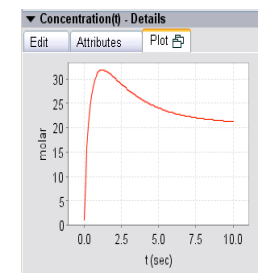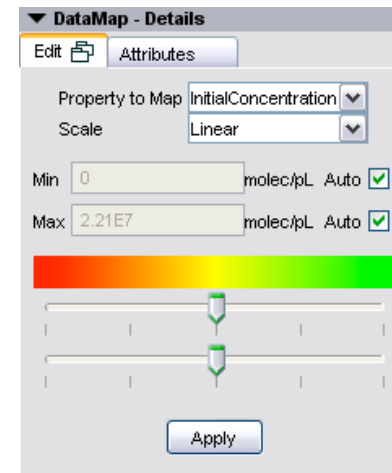
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Example of Customized Visualization: Data Dictionary with BioPAX Ontology

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VLX – The Language of XDA
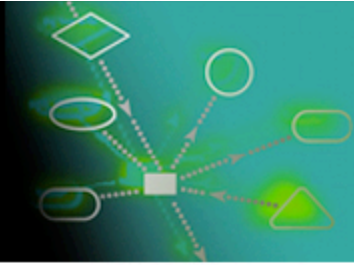
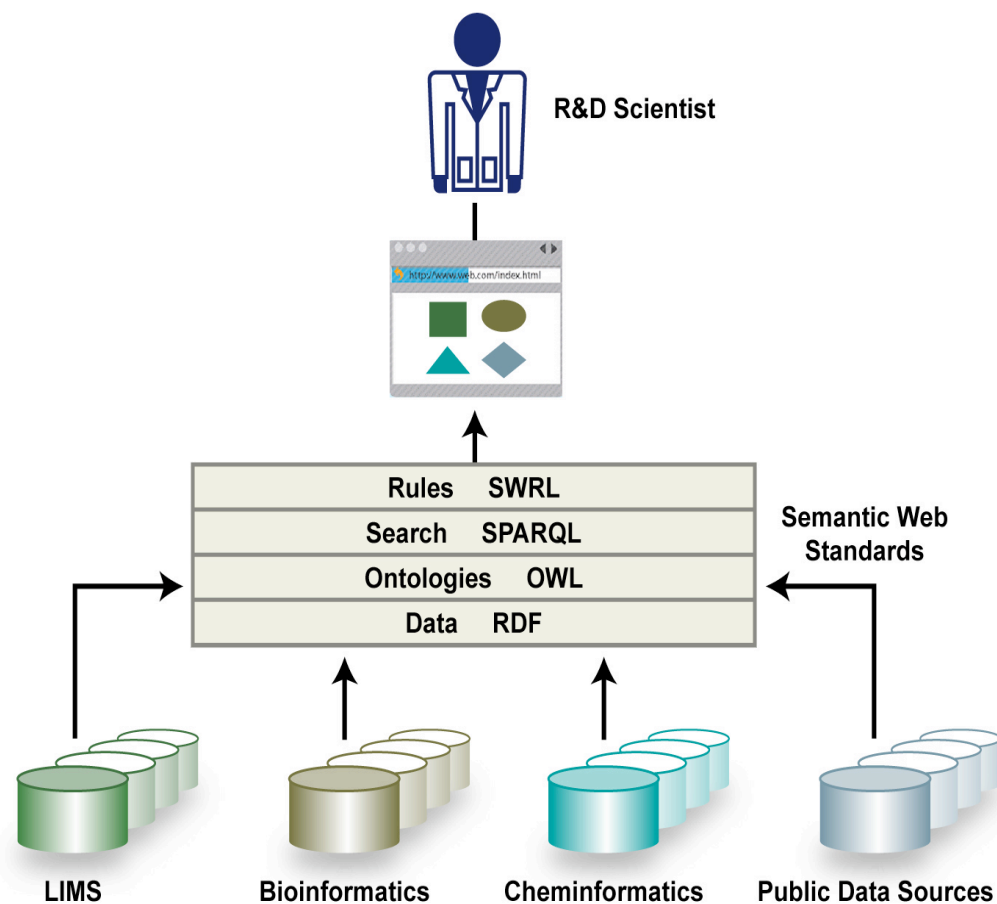- VLX object model defines key objects and relationships (graph objects and properties)

- Ontologies expressed in VLX add domain-specific semantics

- VLX objects and relationships can generate mathematical expressions

- VLX objects, relationships, ontologies, and mathematics are expressed as RDF triples, the language of the Semantic Web

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Teranode XDA Supports the Language of the Semantic Web