BioASQ

A challenge on large-scale biomedical semantic indexing and question answering

WHAT IS BioASQ?

Task A: Hierarchical text classification
- Organizers distribute new unclassified PubMed articles.
- Participants assign MeSH terms to the articles.
- Evaluation based on annotations of PubMed curators.
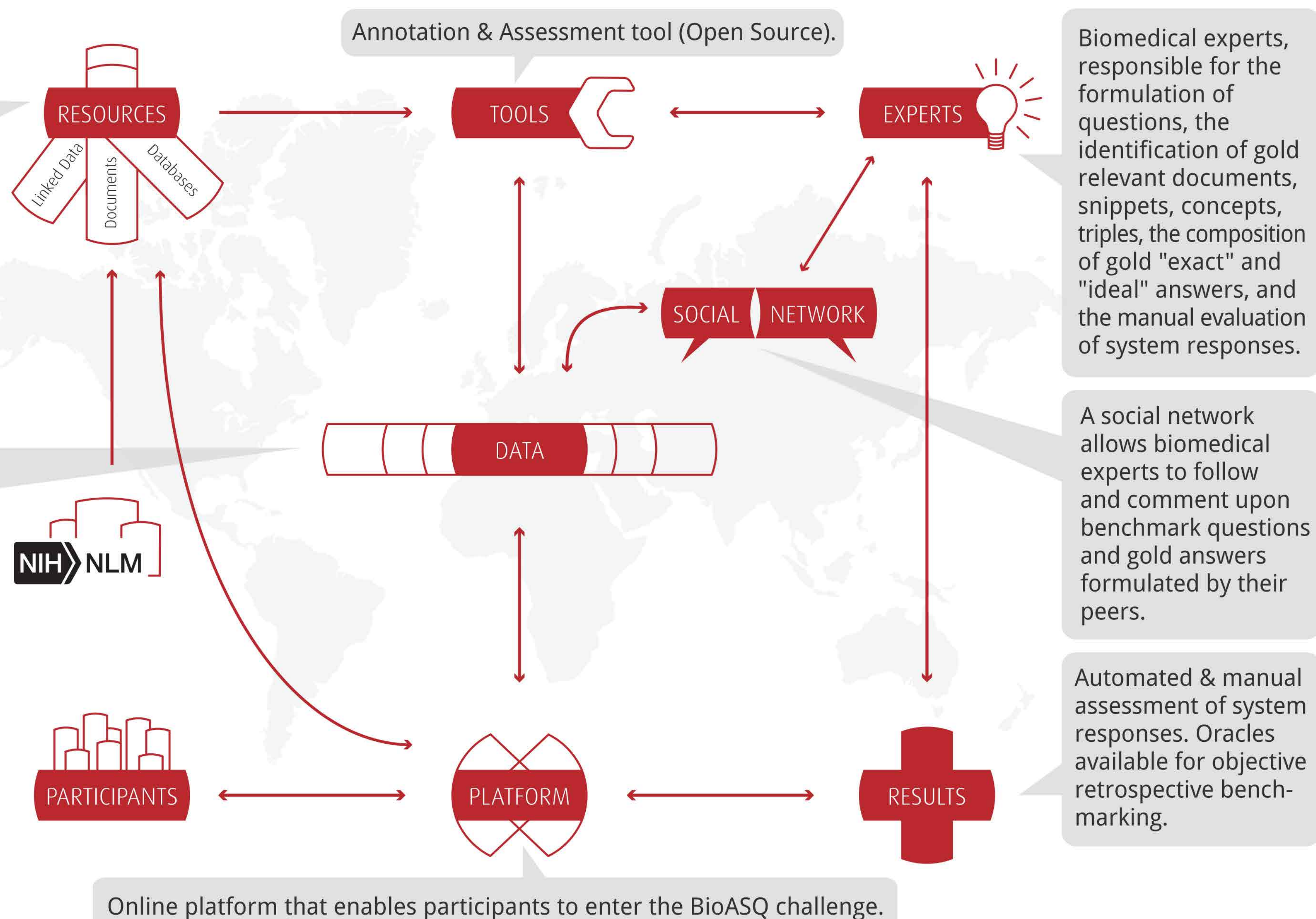
Task B: IR, QA, summarization, ...
- Organizers distribute English biomedical questions produced by a team of biomedical experts.
- Participants provide: relevant articles, snippets, concepts, triples, "exact" answers (e.g., named entities), "ideal" answers (paragraph-sized summaries).
- Evaluation: both automatic (GMAP, MRR, ROUGE etc.) and manual (by biomedical experts).

Data sources include both **text** and **structured** info.

- PubMed articles.
- MeSH, Gene Ontology, UniProt, Jochem, Disease Ontology.

Annotation & Assessment tool (Open Source).

Biomedical experts, responsible for the formulation of questions, the identification of gold relevant documents, snippets, concepts, triples, the composition of gold "exact" and "ideal" answers, and the manual evaluation of system responses.

Task A: 12,000,000 articles with MeSH headings available for training. New test batches available every week.

Task B: 1300 English questions, plus gold relevant documents, snippets, concepts, triples, "exact", and "ideal" answers.

A social network allows biomedical experts to follow and comment upon benchmark questions and gold answers formulated by their peers.
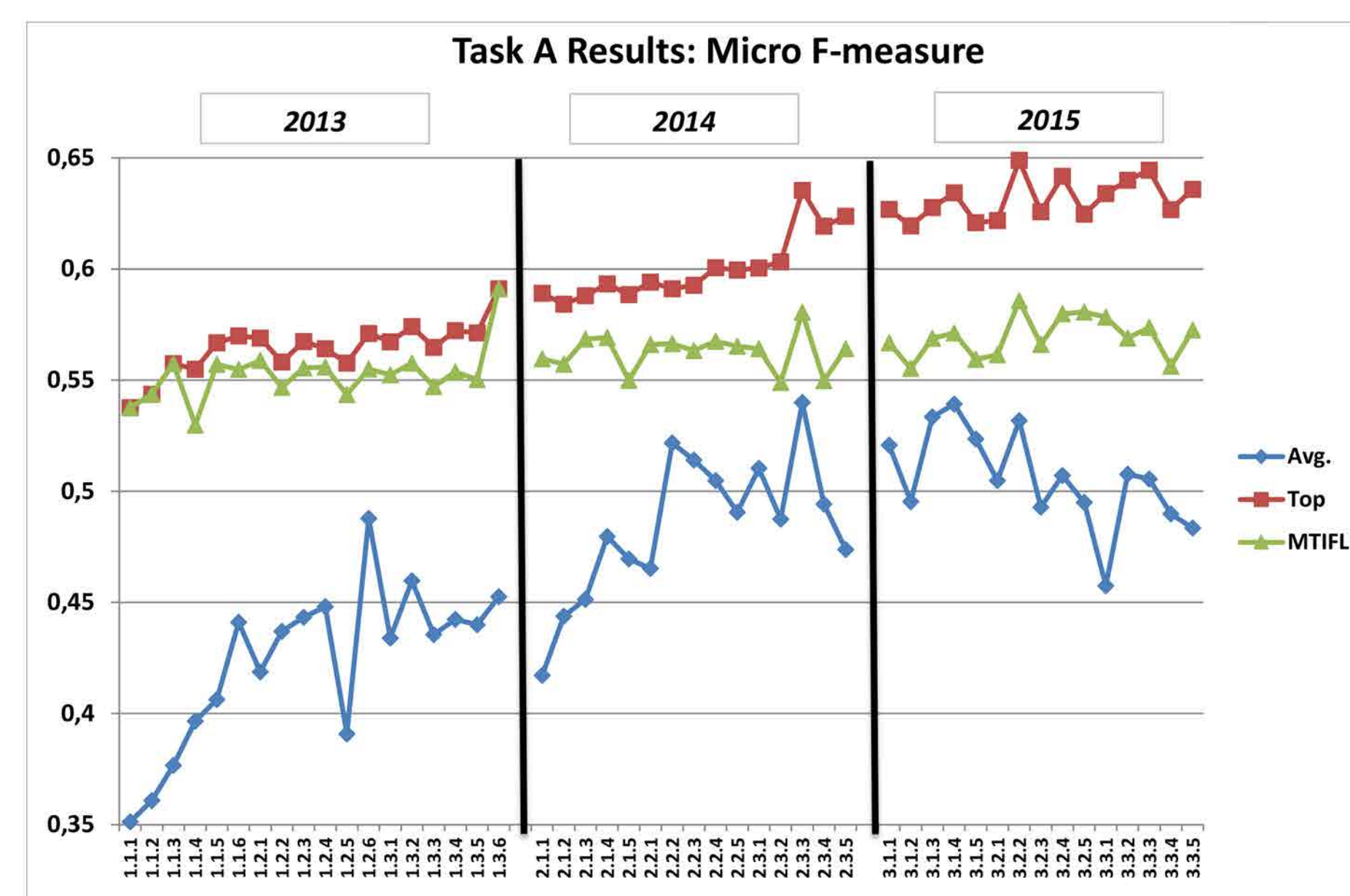
Automated & manual assessment of system responses. Oracles available for objective retrospective benchmarking.

RESOURCES   Linked Data   Documents   Databases

TOOLS

EXPERTS

SOCIAL   NETWORK

DATA

NIH NLM

PARTICIPANTS   PLATFORM   RESULTS

Online platform that enables participants to enter the BioASQ challenge.

PARTICIPANTS

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RESULTS

Task A Results: Micro F-measure

2013 · 2014 · 2015

Legend: Avg. · Top · MTIFL

(y-axis: 0.35, 0.4, 0.45, 0.5, 0.55, 0.6, 0.65)

Stay tuned for BioASQ 4!

www.bioasq.org | twitter.com/bioasq