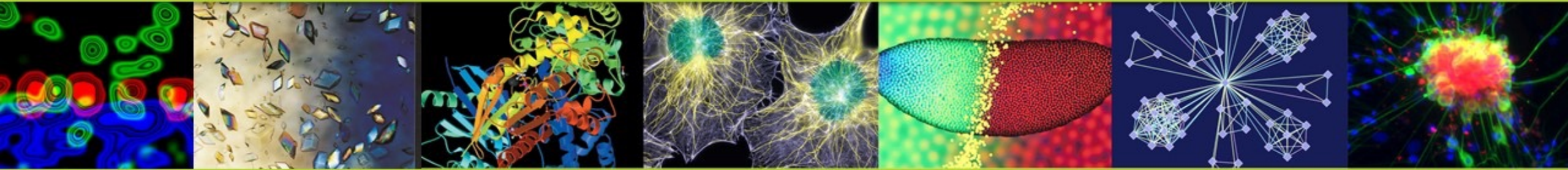National Institute of
General Medical Sciences

Thank you all for your questions and ideas!

Ming Lei, NIGMS

A "Sandbox" with Multiple Learning Modules

NIGMS Biomed Research Learning Sandbox

| Basics of Cloud Computing (Google / Amazon) | MassSpec Data Analysis Univ of Arkansas Med Sci | RNA-Seq Analysis Univ of Maine, MDIBL | 1 | 2 | 3 | 4 | 5 |

By NIH STRIDES

By NIGMS Pilots

New Learning Modules

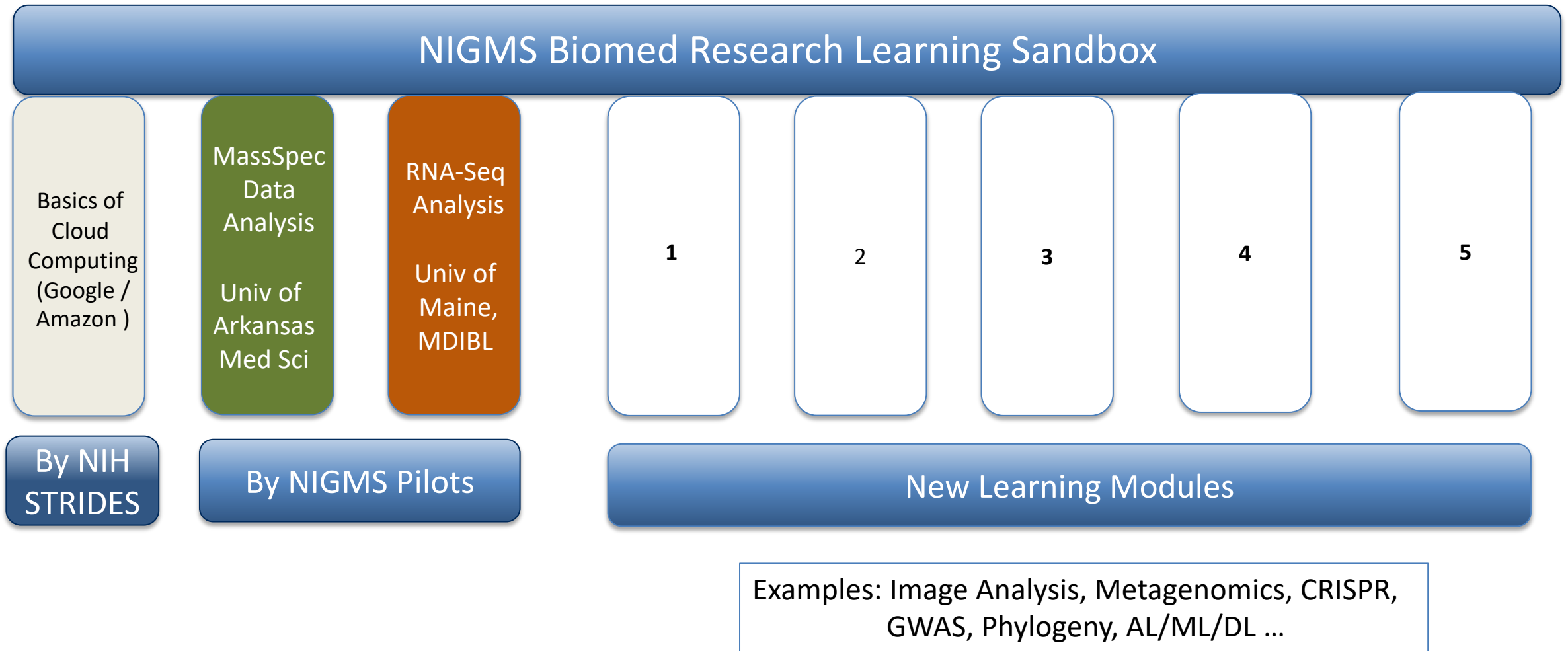Examples: Image Analysis, Metagenomics, CRISPR, GWAS, Phylogeny, AL/ML/DL …

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Support for the Development of New Learning Modules

Objective Support biomedical researchers, with help from Cloud service providers if needed, to convert curricula in biomedical research including those using data science approaches such as AI/ML/DL into cloud-based learning modules

Expectations Interactive, enabling self-learning;
Commitment to disseminate the products for public access through venues such as the NIGMS Sandbox;

Commitment to deliver robust learning modules within one year

Mechanism Administrative Supplements to GM Awards with expertise in developing and conducting research training;

1 year award to cover grantee's effort and fees to a Cloud service provider

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Post-Development Plans

- Deploying the Sandbox to a non-governmental cloud infrastructure

  - For example: BMRLearning.net

  - Broadly accessible to students

- Management and maintenance of the Sandbox

  - Supported by NIGMS

NIH National Institute of General Medical Sciences