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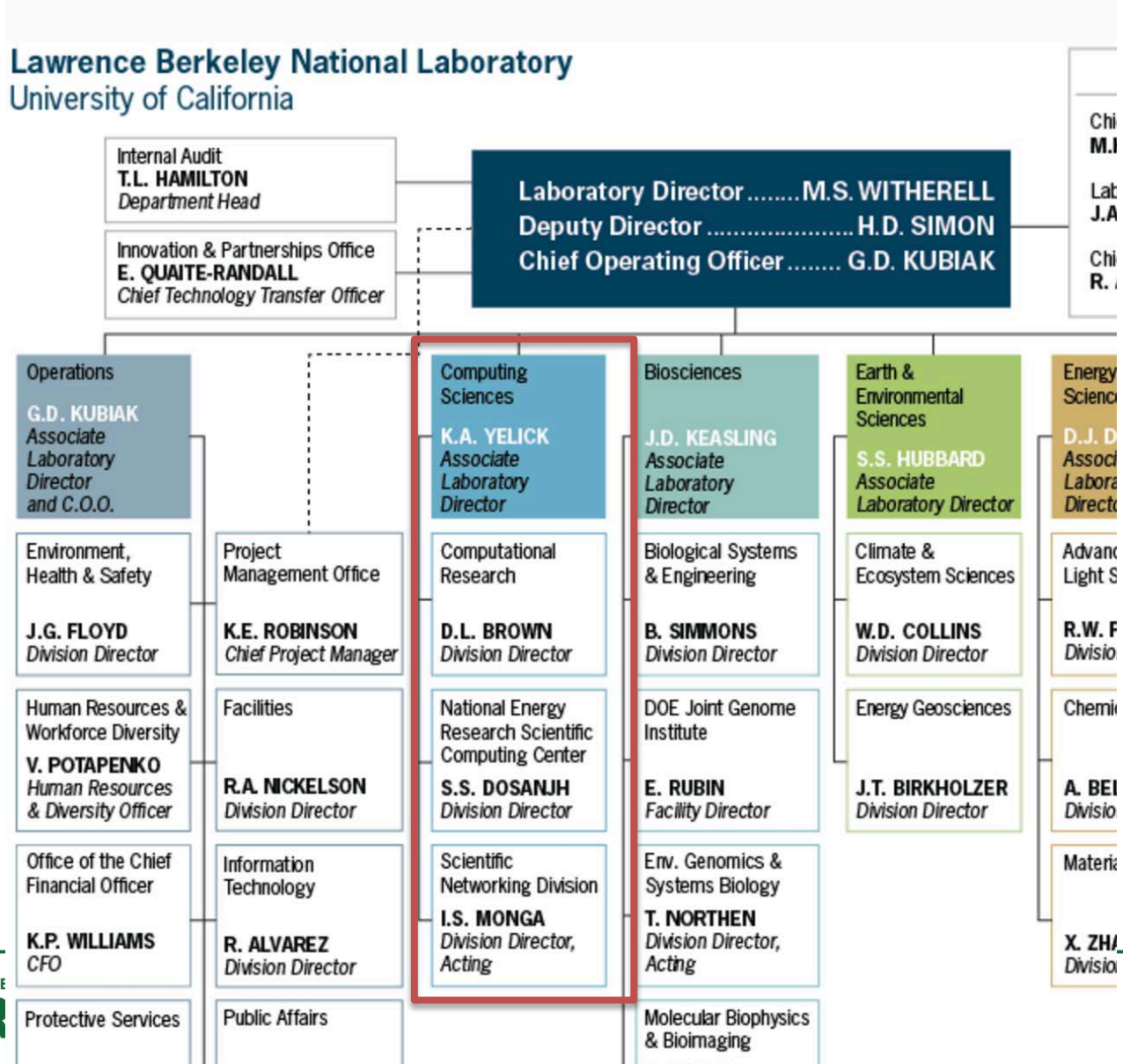
The Computational Research Leadership Council (CRLC)

David Brown

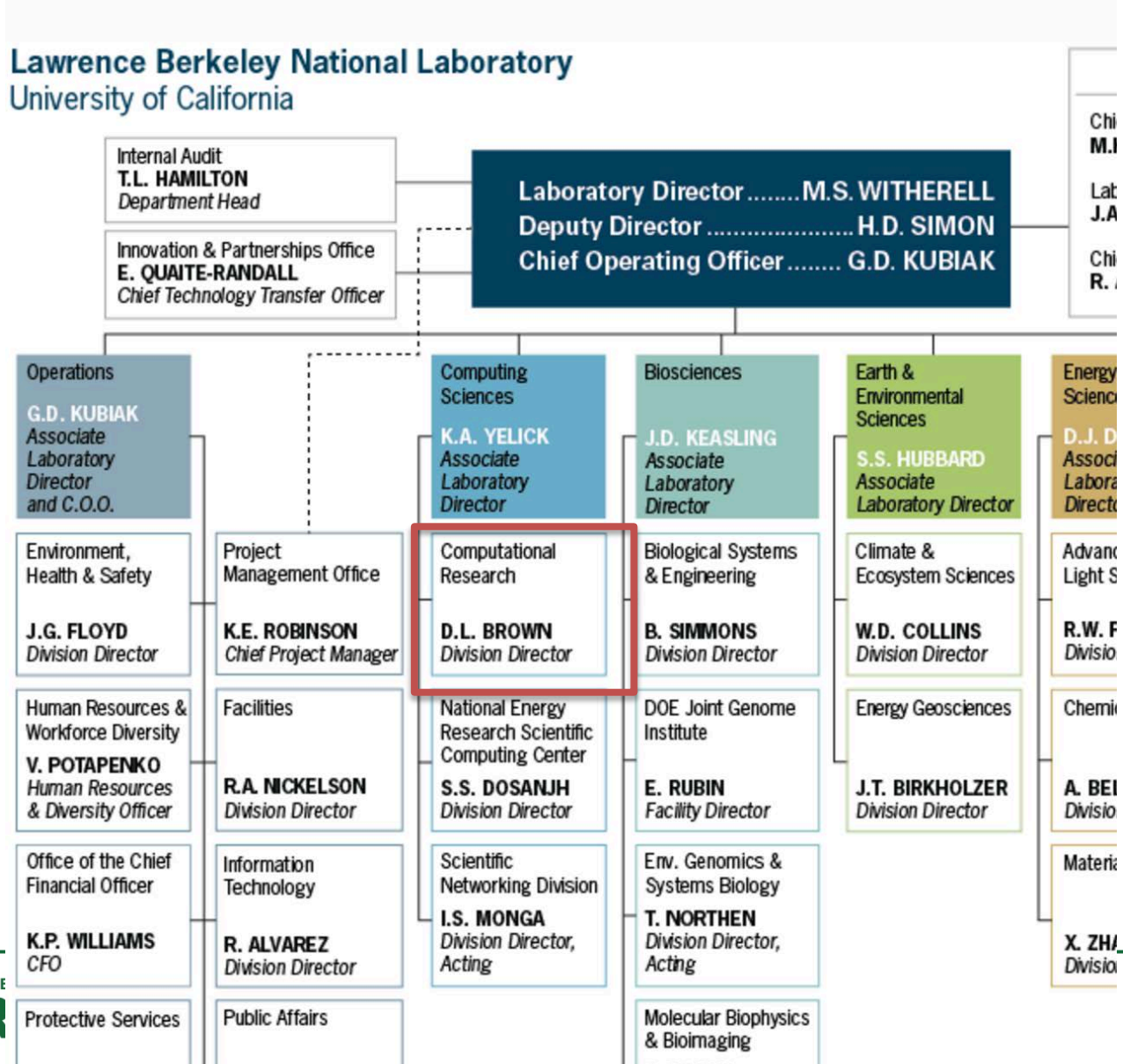
Lawrence Berkeley National Laboratory

ASCAC, April 5, 2016

Each of the 8 DOE Multipurpose Laboratories has a Computing organization



Within the Computing organization is a Research Division



Our research divisions represent a significant national investment and resource in math, CS and computational science

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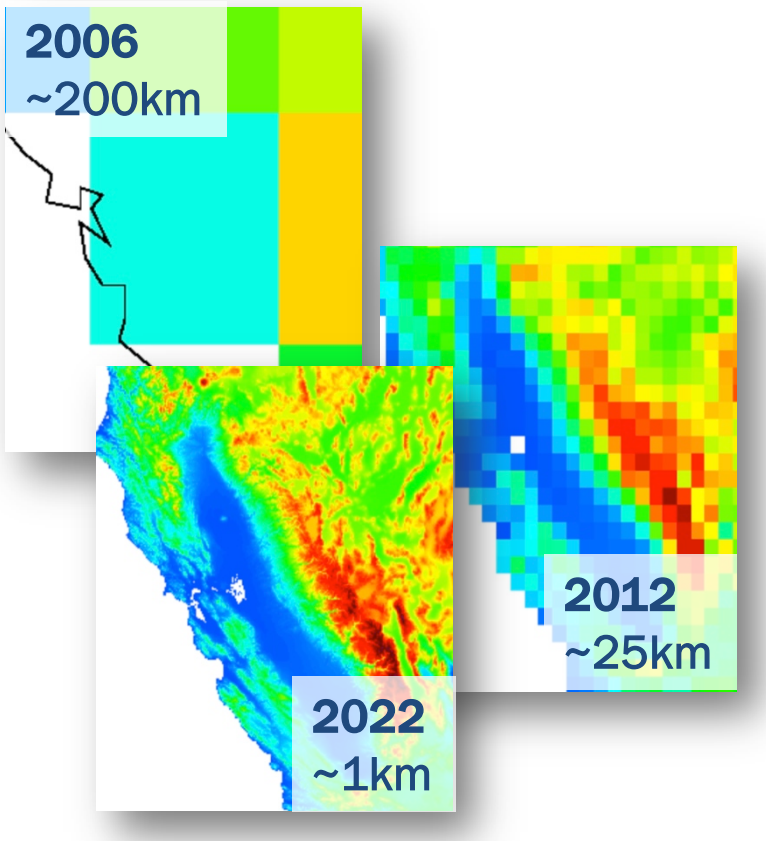
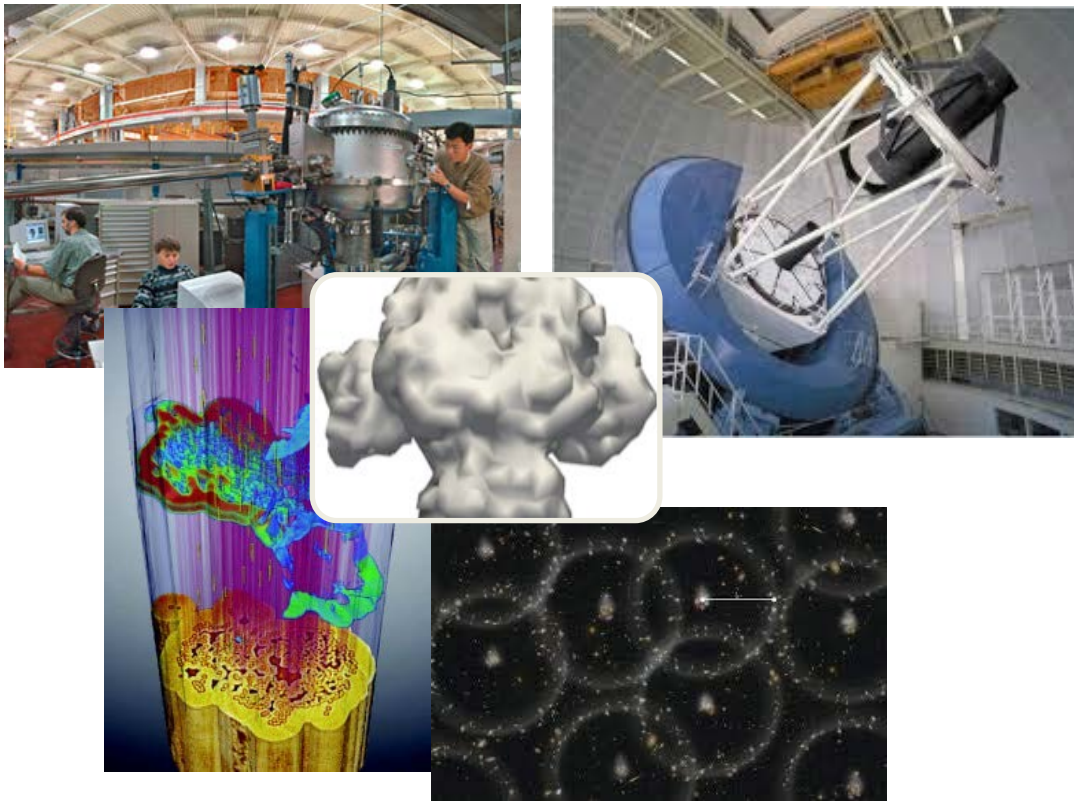
Today, Math and Computing play an essential role in all areas of Science





- Scientific understanding increasingly enhanced by high-fidelity modeling and simulation
- Math and computing transforms experimental and observational data to scientific understanding

Our Research Divisions have significant areas of common interest

- **We develop and maintain research programs and a skilled workforce to support DOE's computing and applied math needs**
- **We are significant stakeholders in**
  - **ASCR Research Program**
  - **Exascale Computing Program**
- **Management and Funding Model changes associated with start up of ECP represent a challenge for all of our Divisions**

The Computational Research Leadership Council (CRLC) was formed in January 2016

Adolfy Hoisie, PNNL

Marc Snir, ANL

Kerstin Kleese van Dam, BNL

David Brown, LBNL, 2016 chair

Frank Alexander, LANL

Barney Maccabe, ORNL

Scott Collis, SNL

Lori Diachin, LLNL

Purpose of the CRLC

- **Identify and address issues of common interest to the CRDs**
  - Workforce development – recruitment, retention, diversity
  - Research roadmaps
  - Major initiatives
  - Workshops
  - Collaborations
- **Represent these interests to major stakeholders**
- **Work in partnership with stakeholders on major initiatives**
  - ASCR Research Roadmap
  - Exascale Computing Program Lab Leadership

CRLC Charter

- **"Address current and future issues of common interest to the [Lab] Computing Research organizations and represent ... to relevant stakeholders"**
- **Members appointed and reconfirmed by the Associate Lab Directors for Computing (or their equivalent) annually – 1 per lab**
- **Chairmanship rotates annually through the Labs alphabetically**
- **Meetings**
  - Initial Meeting – January 11, 2016, Albuquerque
  - Plan ~2 face-to-face meetings per year
  - Weekly telecons – *include other ASCR POCs at the Labs*
- **CRLC may establish subcommittees**

We are meeting with ASCR Research Leadership to contribute to developing a **Long Range Plan** for the Research Program

- **Bill Harrod (Research Director)**
  - Steve Lee, Applied mathematics
  - Lucy Nowell, Computer Science
  - Rich Carlson, Next Generation Networking for Science
  - Ceren Susut, Partnerships

- **February 2, 2016: Washington DC – initial meeting**
- **March 28, 29: Washington and Rockville**
- **March 31: "Deep Dive" on Convergence of HPC and Data Intensive Science**
- **Regular bi-weekly telecons**

We have also been meeting regularly with the **ECP** Lab Leadership

- **January 12, 2016 - Albuquerque, NM (by telecon)**
- **January 28, 2016 – Rockville, MD**
- **February 22, 2016 – Argonne National Lab**
- **March 29, 2016 – Rockville, MD**

- **Topics:**
  - Keeping communication lines open between ECP management and the Lab Research Divisions
  - Identify Lab capabilities relevant to ECP Software Technology
  - Review of ECP Software Technology White Papers

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