

# Technology Transfer at NIST

Paul Zielinski

Director, Technology Partnerships Office

The overall process by which NIST **knowledge, facilities, or capabilities** in measurement science, standards and technology promote U.S. innovation and industrial competitiveness in order to enhance economic security and improve quality of life.

## **NIST Technology and Work Products**

- Participation in Documentary Standards Committees
- Standard Reference Data
- Standard Reference Materials
- Patents and Licensing
- Software and Other Downloadable Products
- Technical Publications

## **NIST Collaborations**

- CRADAs
- User Facilities – Research Participants
- Postdoctoral Researchers
- Guest Researchers
- Start-ups and Young Companies
- Calibration
- Accreditation Services
- Small Business Innovation Research Conferences, Workshops, and Inquiries
- Competitions

Purpose: Establish a more conscious and comprehensive technology transfer strategy that will enhance the overall management of our scientific enterprise.

- Associate Director for Innovation & Industry Services (Chair)
- Associate Director for Laboratory Programs
- Director, NCNR (User Facility Representative)
- Director, MML (Measurement Laboratory Representative)
- Director, EL (Technology Laboratory Representative)
- Director, PCO
- Chief, Budget Division
- NIST Chief Counsel



## Collaborations

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- Reduced paperwork requirements
- Delegations to Division level
- Service Now



## Disclosures

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- Removed formal presentation
- Service Now

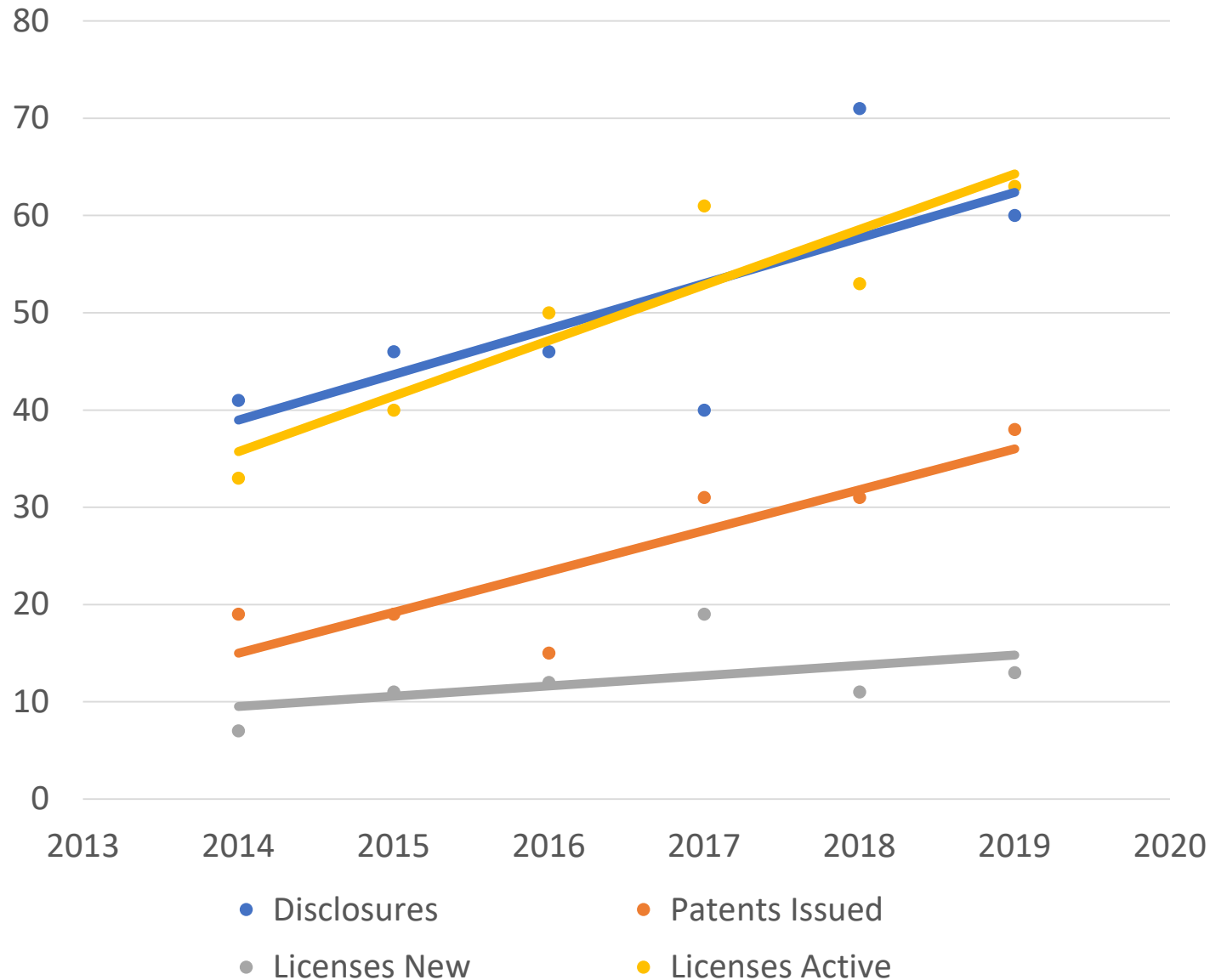


## SBIR

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- Topics on NIST priorities
- Increased Phase 2

# Intellectual Property



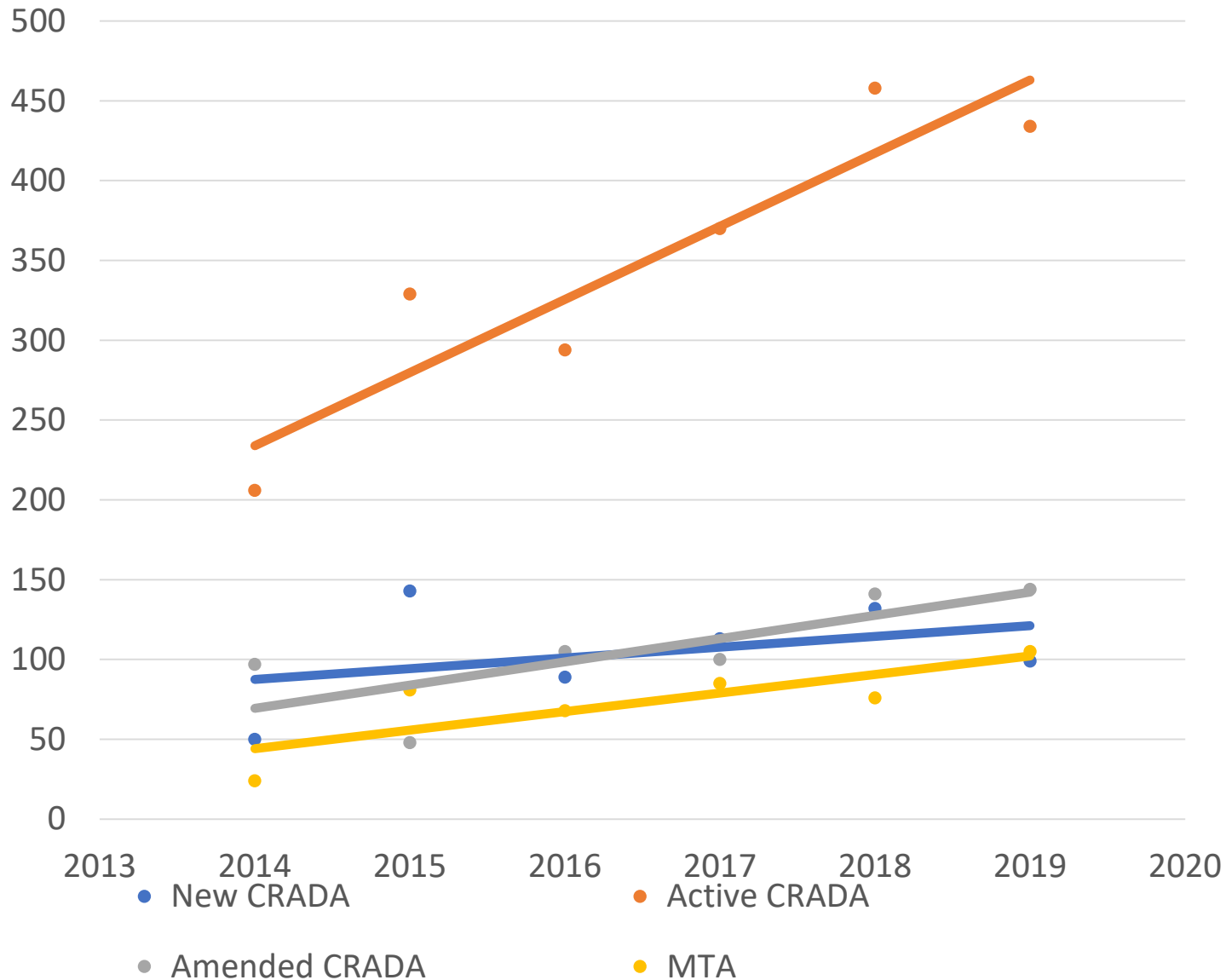
**1.** Continue to trend up across categories

**2.** Active licenses growing – major metric – up one third

**3.** Patent portfolio growing - issued patents up nearly double

**4.** Disclosures still key – up more than one third

# Collaborations



**1.** Active CRADAs still very high – nearly double

**2.** Shift from consortia to more bilateral in 2019 – up a quarter

**3.** Amendments leveling double – relationships continuing

**4.** Material transfer becoming more important – more than double

Move to a more strategic approach to partnership and commercialization



NIST on a Chip Program Pilot



Increase focus on NIST strategic priorities



Increase customer service and program integration

- **Objective:** Develop a comprehensive pathway to support the development of NIST products and services toward commercialization and adoption by private companies for economic growth.
- **Proposal:**
- Strategic investment
  - Technology Maturation Accelerator Pilot
  - NIST Science and Technology Entrepreneurship Program (N-STEP)
  - NIST Small Business Innovation Research program (SBIR)
  - CRADAs



# Technology Maturation Accelerator Pilot



## What is the Goal?

- Accelerate maturation of emerging laboratory “technology” or “intellectual property” w/significant commercial promise by providing additional support for translational research necessary to prove feasibility and/or build a laboratory-scale working prototype with a basic or core set of features
- Pilot funding (\$1.0M) to assess interest/demand and get feedback on whether a scaled-up program can be justified



## How does it work?

- \$1M will be made available to support new projects up to \$250K; project must be completed in 12 months from date of award; funds must be obligated by September 30, 2020
- 90-day streamlined process for merit review and commercial assessment based on 3-page written proposals
- ADIIS and ADLP shortlist proposals for oral pitch (7 mins w/10 min Q&A) and make final selection decisions
- Reviewers of proposal and oral pitch will include experienced non-NIST entrepreneurs, investors, and technology managers



## Who can participate?

- We are seeking proposals from all NIST Laboratories
- NIST associates are encouraged to participate on project teams
- Project leader must be a NIST employee; teams may designate co-project leaders



## What are the Desired Outcomes?

- De-risk and advance technology readiness to evaluate commercial and impact potential of emerging technology
- Attract an industry partner interested in committing to collaborative development of the technology
- Collaborative development with industry partner provides path toward commercialization

- Partnership with TEDCO (PIA)
- Launched 18 Nov 2015
- Companies funded: 10 (7 new spinouts and 3 existing)
- Four States, MD, CO, IL, CA
- Six former Federal employees, Four Associates
- **Awards Funding: \$1,120,000**



**QUESTIONS?**