

NIH Biosketch and SciENcv

Strategic Council for Research Excellence, Integrity, and Trust

Neil Thakur, Ph.D.

The ALS Association

Bart Trawick, Ph.D.

National Library of Medicine

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Biosketch Context

Primary purpose: Evaluate personnel in grant applications

Context

- High rates of failure= high stress for applicants
- Scientists often submit multiple biosketches per year
- Specific instructions that vary by application and agency in small ways
- Strong reviewer and staff culture that can make change hard

Biosketch design influences the discussion

- NIH says what it values about career advancement
- Scientist frame their own work, or do reviewers infer from publications?
- Changes discussions about key personnel fitness
 - Are certain contributions worth discussing (preprints, software, shared resources)?

NIH goals for biosketch improvement

- Honor scientific contributions
 - Context provided by applicant, not inferred from publications
 - Honor open science practices (shared resources, preprints)
 - Honor non-traditional outputs (software, resource curation, etc.)
- Reduce burdens (same data reported multiple places in different ways)
 - Application burden- ORCID, Pubmed, biosketch formatting
 - Reporting burden- Public access, progress reports, subsequent biosketches
- Reduce information costs/ increase interoperability
 - Structured data made available (XML/API)
 - COI identification
 - Support collaboration: reduce the insularity that leads to inequity and inefficiency

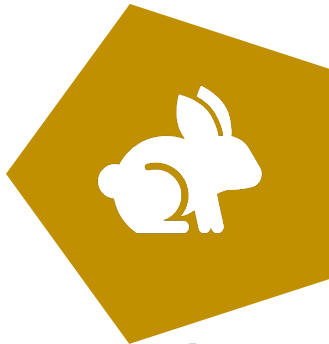
Changes to the Biosketch since 2015

- Personal statement
 - Old: narrative only
 - New: Narrative +5 citations
- Expansion in allowable citations
 - More than publications (e.g. software, shared resources)
 - Pre-prints
- Citation counts
 - Old: 'Encouraged' to limit to 15 *publications*
 - New
 - 25 total- Personal statement; up to 5 contributions to science that include brief description + 4 citations each
 - Link to full online bibliography

A biosketch report writer

**SciENCv = Science
Experts Network
Curriculum Vitae**

*Use your data from multiple systems to support
funding applications, reporting, and
collaboration with less burden and complexity*



**Reduce
Burden**



**Leverage
Data**



**Track
Impact**

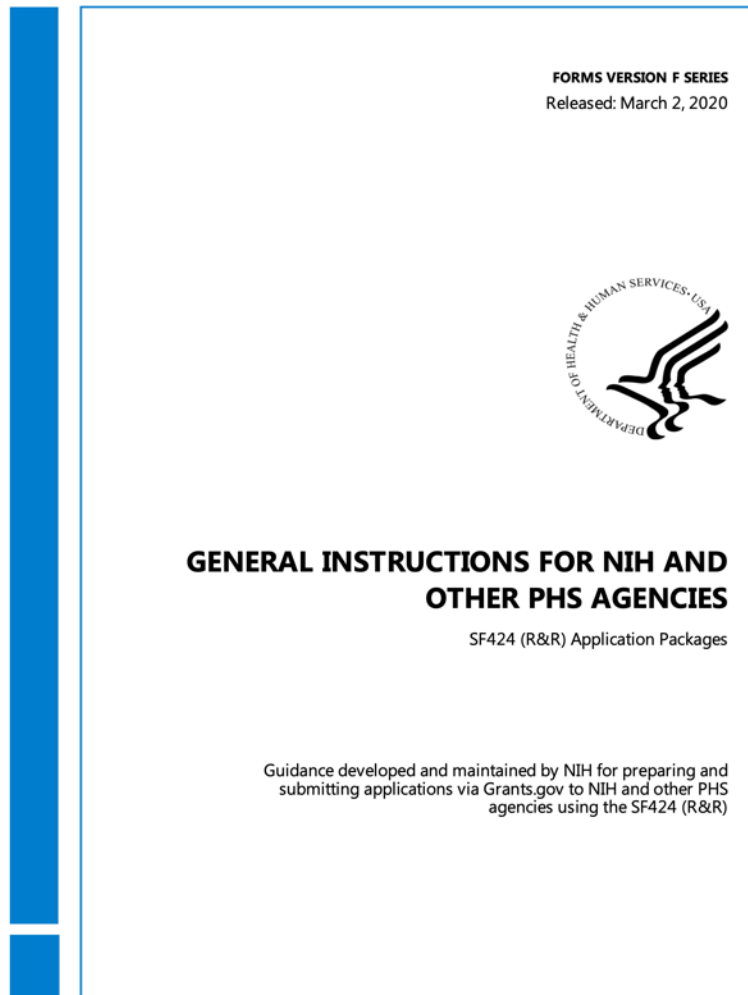
Current Features

NIH biosketches, NSF biosketch, NSF Current and Pending Support, Dept. of Ed. IES biosketch
Integration with ORCID, Fastlane, PubMed/PMC, and eRA Commons

<http://www.ncbi.nlm.nih.gov/sciencv>



Reduce dependency on agency administrative guidelines



NIH SF424 Application guide, 310 pages



NSF Proposal and Award Policies and Procedures Guide, 193 pages



SciENcy has a common data model: copy data to another format

NIH Biosketch

NSF Biosketch



Go from here...



Or here!

NIH Biosketch form for Dr. Travis B. Bart. The form includes sections for personal information, education/training, positions and honors, and other experience and professional memberships. It is a structured template for sharing research data.

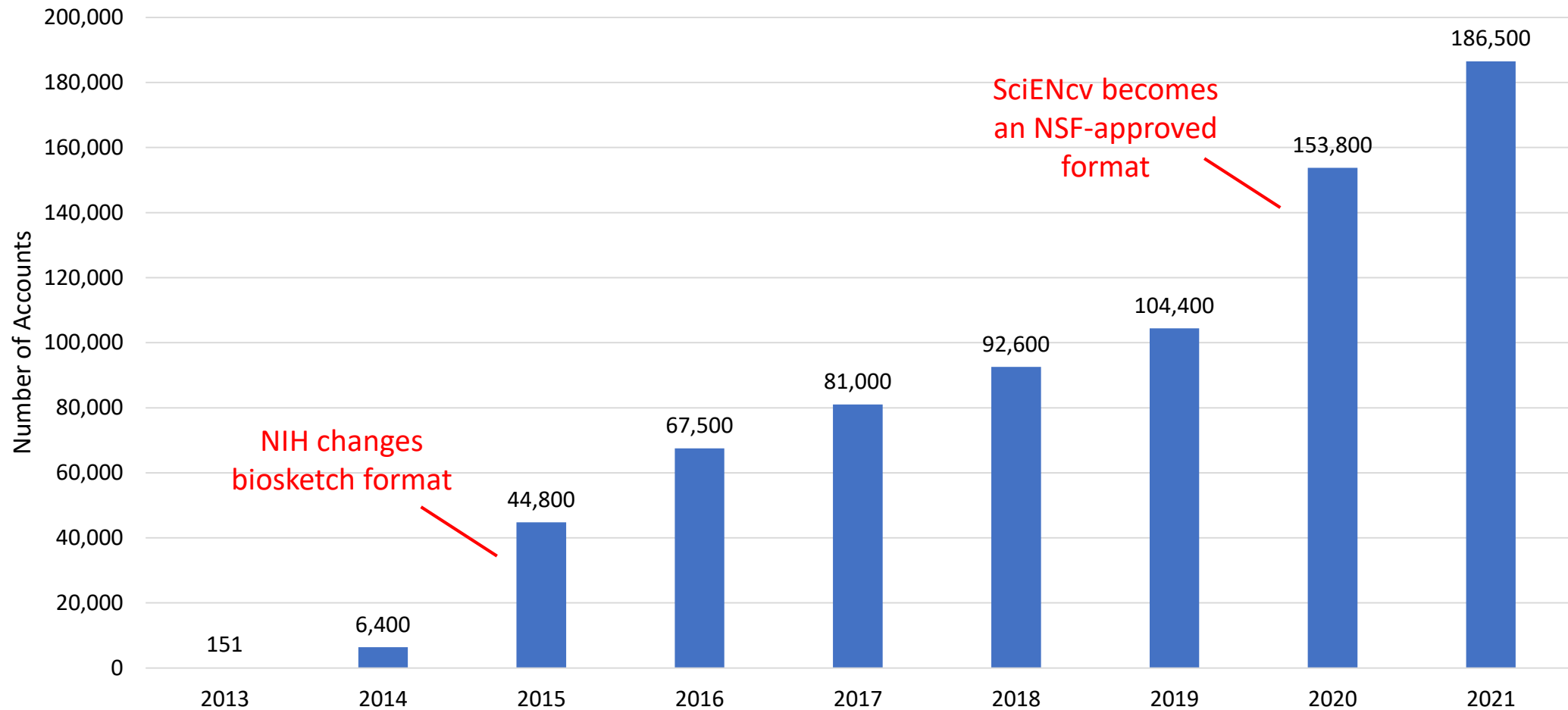
NIH Biosketch form for Dr. Travis B. Bart. The form includes sections for personal information, education/training, positions and honors, and other experience and professional memberships. It is a structured template for sharing research data.

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To here!

SciENcv growth



Final thoughts

Biosketch rules make reviewers attend to funder values

- NIH values open science
- NIH values voice of the applicant

Forms and reporting have limitations

- Culture is strong
- Structured career data and lists of individual scientific products are underused
- Deficits of insularity (biases in collaboration, tenure and promotion) remain

More change ahead: NSPM-33

- “researchers to be able to report the same information in the same way to the greatest extent possible, regardless of which funding agency they’re applying to”
- <https://www.whitehouse.gov/wp-content/uploads/2022/01/010422-NSPM-33-Implementation-Guidance.pdf>