NIH Biosketch and SciENcv

Strategic Council for Research Excellence, Integrity, and Trust

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The ALS Association

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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







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



Reduce dependency on agency administrative guidelines

FORMS VERSION F SERIES
Released: March 2, 2020



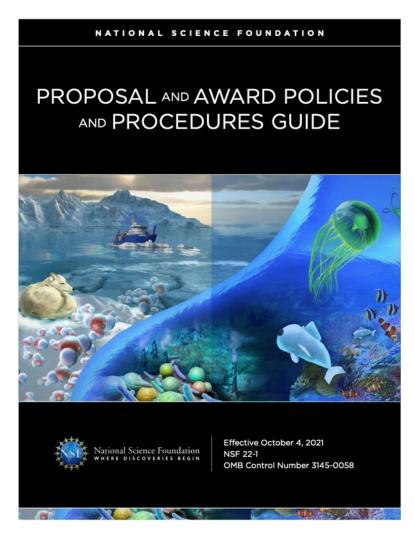
GENERAL INSTRUCTIONS FOR NIH AND OTHER PHS AGENCIES

SF424 (R&R) Application Packages

Guidance developed and maintained by NIH for preparing and submitting applications via Grants.gov to NIH and other PHS agencies using the SF424 (R&R)

NIH SF424 Application guide, 310 pages





NSF Proposal and Award Policies and Procedures Guide, 193 pages





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

NIH Biosketch



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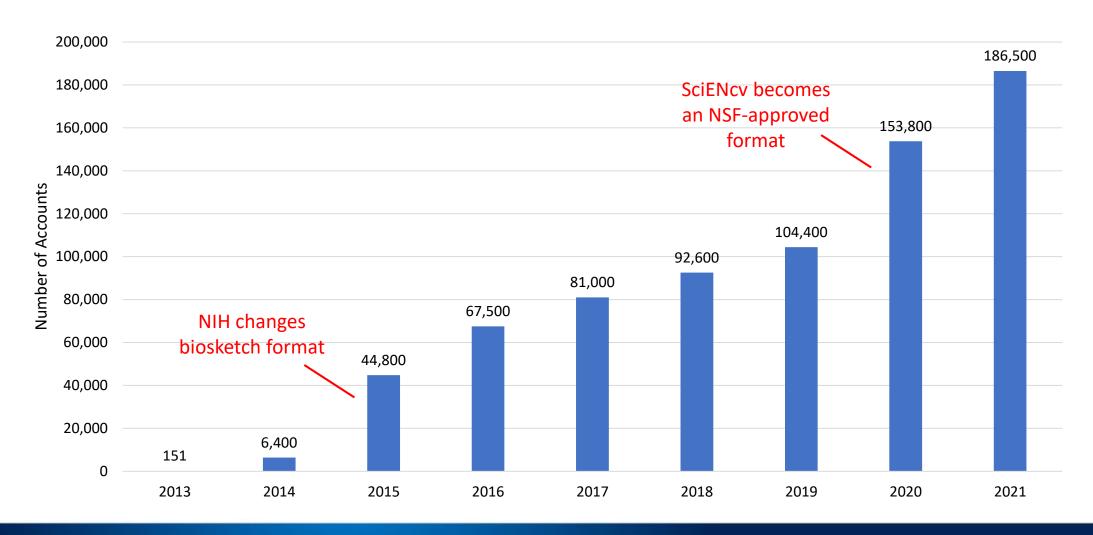
NSF Biosketch

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ORCID 0000-0002-3635-3508				
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Texas A&M University	College Station, TX	Chemistry	BA	1992
University of Texas Health Science Center at Houston	Houston, TX	Biochemistry	MS	1996
University of Texas Health Science Center at Houston	Houston, TX	Immunology	PHD	2000
hi APPOINTMENTS 2000 - Staff Scientist, Nation Betherda, MD	nal Institutes of	Health, National	Library of Medic	ine.
(c) PRODUCTS				
Products Most Closely Related to th	e Prepared Pr	elect		
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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