Preeminent Research University Funding Metrics Audit

FSU

OFFICE OF AUDIT & ADVISORY SERVICES

Office of Audit and Advisory Services
Report #AR25-05

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Undra Baldwin, Chief Audit Officer

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EXECUTIVE SUMMARY

A. Background

In 2013, the Florida Board of Governors (BOG) voted to designate Florida State University (FSU) as a Preeminent State University. Florida Statutes 1001.7065, Preeminent State Research Universities Program, details the 13 academic and research excellence standards established for the program. FSU's performance results related to the Preeminent Research University Funding (PRF) Metrics are reported annually in the Accountability Plan. Universities are eligible for Emerging Preeminent status if they meet 7 of 13 PRF Metrics, and for Preeminent status if they meet 12 of 13 Metrics[1]. FSU met all 13 benchmarks in the State University System of Florida 2024 Accountability Plan, which is the most recently available report.

The 13 PRF Metrics consist of the following:
- Metric A: Average Grade Point Average (GPA) and SAT Score
- Metric B: Public University National Rankings
- Metric C: Freshman Retention Rate
- Metric D: Four-Year Graduation Rate
- Metric E: National Academy Memberships
- Metric F: Total Annual Research Expenditures ($M)
- Metric G: Total Annual Non-Medical Science and Engineering Research Expenditures ($M)
- Metric H: Number of Broad Disciplines Ranked in Top 100 for Research Expenditures
- Metric I: Utility Patents Awarded
- Metric J: Doctoral Degrees Awarded Annually
- Metric K: Number of Post-Doctoral Appointees
- Metric L: Endowment Size ($M)
- Metric M: Total Annual Science and Engineering Research Expenditures ($M)

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[1] The University of Central Florida is recognized as having Emerging Preeminent status. Meanwhile, Florida State University, Florida International University, University of Florida, and University of South Florida are designated as "*Preeminent Research Universities*".

Florida Statutes 1001.706, Powers and Duties of the BOG, requires the BOG to define the data components and methodology used to implement Florida Statutes 1001.7065 and requires each University to conduct an annual audit to verify that the data submitted pursuant to Florida Statutes 1001.7065 complies with the data definitions established by the BOG. The BOG last updated the PRF Metrics Methodology Document in October 2020. The data supporting the PRF Metrics comes from a variety of sources, including:

- Data submitted to the BOG

- Data reported to external entities

See *Appendix A* for the complete list of sources for each PRF Metric.

B. Objectives and Scope

The specific objectives of this audit were to:

1. Determine whether the processes established by FSU ensure the completeness, accuracy, and timeliness of data submissions to the BOG that support the PRF Metrics.
2. Provide an objective basis of support for the President and BOT Chair to sign the representations made in the Performance-Based Funding Metrics/Preeminent Research University Funding Metrics Data Integrity Certification Letter.

The scope of this audit covered data submissions from January 2023 through July 2024. OAAS performed detailed testing on all data submissions used for these Metrics.

C. Standards

This audit was conducted in accordance with the *International Standards for the Professional Practice of Internal Auditing*. These standards require that audit departments plan and perform the audit to obtain sufficient, reliable, relevant, and useful evidence. It is our opinion that the evidence obtained during our review provides a basis for the findings and conclusion noted in this report.

D. Overall Conclusion

Overall, it appears that the University has established adequate controls and processes to:

1. Ensure the completeness, accuracy, and timeliness of data submissions to the BOG and external entities, which support the University's PRF metrics.
2. Affirm the representations in the Data Integrity Certification form.

While we have identified opportunities for improvement regarding the process surrounding Preeminent Metric K – Number of Post-Doctoral Appointees, we view the overall impact on the calculation of the PRF Metrics as immaterial.

SUMMARY OF ISSUES

Issue #1: (Moderate) The Graduate School's process for determining which employees to include in the count for the Preeminent Metric K - Number of Post-Doctoral Appointees needs improvement.

Per Florida Statute 1001.7065, Preeminent State Research Universities Program, Metric K - Number of Post-Doctoral Appointees, is based on having 200 or more postdoctoral (postdoc) appointees annually. The source for this Metric is the National Science Foundation (NSF)/National Institutes of Health Survey of Graduate Students and Post-doctorates in Science and Engineering (Survey).

Each year, the Graduate School submits a postdoc appointee count in the Survey. According to the Survey methodology, "the definition of a postdoc varies by institution. Respondents were instructed to use their institution's definition[2]."

Several years ago, the Graduate School created the Postdoc Scholar Count Instructions (Count Instructions) for identifying which employees to include in the Survey. The Count Instructions include additional employee job codes to use for the count, as well as additional steps needed to verify the count. The Count Instructions generally align with the NSF definition.

In addition, the Office of Postdoctoral Affairs' created the Handbook for Postdoctoral Fellows (Postdoc Manual), which includes a more restrictive definition than the NSF definition. The Postdoc Manual is located on both the Office of Postdoctoral Affairs' and Office of Human Resources' (HR's) websites.

A postdoc fellow, defined in the Postdoc Manual, includes the following:

➢ Appointees must be awarded a Ph.D. or equivalent doctorate (e.g., Sc.D., M.D.) in an appropriate field within 5 years prior to appointment. Exceptions can be made on an individual basis when justifiable and accompanied by supporting documents with prior approval from the Office of Postdoctoral Affairs.

➢ Individuals may not hold an appointment as a postdoc scholar for longer than four years. Under special circumstances, as approved in advance by the Provost, postdoc appointments may be renewed for an additional year for a maximum of five years total.

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[2] NSF defines a postdoc as "meeting both of the following qualifications: (1) holds a recent doctoral degree, generally awarded within the past 5–7 years, such as Ph.D. or equivalent (e.g., Sc.D., D.Eng.), or first-professional degree in a medical or related field (e.g., MD, DDS, DO, DVM), or foreign degree equivalent to a U.S. doctoral degree; and (2) has a limited-term appointment, generally no more than 5–7 years, primarily for training in research or scholarship, and working under the supervision of a senior scholar in a unit affiliated with the institution."

The Postdoc Manual identifies 2 classifications for postdoc appointments: Postdoctoral Scholar Appointments (hired under job code M9189) and Postdoctoral Courtesy Appointments (hired under job code H9189).

In our testing of 50 sampled postdocs for the Fall 2023 postdoc count, we noted the following:

1. **The Count Instructions and the Postdoc Manual are not aligned with each other. In addition, while discussions were held with FSU Leadership regarding the Count Instructions, no documentation was provided to confirm that the Count Instructions or the Postdoc Manual were formally approved.**

2. **Five (5) employees included in the postdoc count were included in non-postdoc job codes per the Count Instructions. However, no documentation was provided of the Graduate School's communication with the departments confirming the employee was performing postdoc duties.** Some departments will move employees out of a postdoc job code classification to another job code in order to provide benefits to that employee. Currently, FSU does not have a specific job code classification for postdocs with benefits. We were unable to determine whether the employee's job duties remained aligned with those of a postdoc. **One (1) of these employees, a Senior Research Associate, should not have been included in the count due to the nature of the employee's position.**

3. **The Count Instructions do not have mechanisms in place to review the length of time an employee can be counted as a postdoc. Three (3) employees included in the postdoc count were included in the Survey for longer than 7 years, which is not aligned with the NSF guidelines. One (1) of these employees, a Senior Research Associate, was discussed above in #2.** Although the Postdoc Manual states that exceptions are allowed (e.g., due to COVID), the Graduate School does not receive documentation concerning whether these postdocs received a waiver or any other type of exception.

4. **The Graduate School could not provide documentation regarding the reason for including 1 postdoc in the Fall 2023 count.** This postdoc's start day was 1/8/2024, which is outside the Fall 2023 term.

5. **The Graduate School uses the effective date rather than the termination date (official last day worked) to determine whether the appointment was active during the Fall term.** This practice could result in a postdoc being included in the Metric, although they may not have actually worked during the term.

DETAILED OBSERVATIONS

Issue #1: The Graduate School's process for determining which employees to include in the count for the Preeminent Metric K - Number of Post-Doctoral Appointees needs improvement.

Rating: Moderate

Condition:
Per Florida Statute 1001.7065, Preeminent State Research Universities Program, Metric K - Number of Post-Doctoral Appointees, is based on having 200 or more postdoc appointees annually. The source for this Metric is the NSF/National Institutes of Health Survey of Graduate Students and Post-doctorates in Science and Engineering (Survey).

Each year, the Graduate School submits a postdoc appointee count in the Survey. According to the Survey methodology, "the definition of a postdoc varies by institution. Respondents were instructed to use their institution's definition[3]."

Several years ago, the Graduate School created the Postdoc Scholar Count Instructions (Count Instructions) for identifying which employees to include in the Survey. The Count Instructions include additional employee job codes to use for the count, as well as additional steps needed to verify the count. The Count Instructions generally align with the NSF definition.

In addition, the Office of Postdoctoral Affairs' created the Handbook for Postdoctoral Fellows (Postdoc Manual), which includes a more restrictive definition than the NSF definition. The Postdoc Manual is located on both the Office of Postdoctoral Affairs' and HR's websites.

A postdoc fellow, defined in the Postdoc Manual, includes the following:
➢ Appointees must be awarded a Ph.D. or equivalent doctorate (e.g., Sc.D., M.D.) in an appropriate field within 5 years prior to appointment. Exceptions can be made on an individual basis when justifiable and accompanied by supporting documents with prior approval from the Office of Postdoctoral Affairs.

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[3] NSF defines a postdoc as "meeting both of the following qualifications: (1) holds a recent doctoral degree, generally awarded within the past 5–7 years, such as Ph.D. or equivalent (e.g., Sc.D., D.Eng.), or first-professional degree in a medical or related field (e.g., MD, DDS, DO, DVM), or foreign degree equivalent to a U.S. doctoral degree; and (2) has a limited-term appointment, generally no more than 5–7 years, primarily for training in research or scholarship, and working under the supervision of a senior scholar in a unit affiliated with the institution."

➢ Individuals may not hold an appointment as a postdoc scholar for longer than four years. Under special circumstances, as approved in advance by the Provost, postdoc appointments may be renewed for an additional year for a maximum of five years total.

The Postdoc Manual identifies 2 classifications for postdoc appointments: Postdoctoral Scholar Appointments (hired under job code M9189) and Postdoctoral Courtesy Appointments (hired under job code H9189).

The Survey states that the count period is the Fall term. The Graduate School determines the date range for the count by using the Academic Calendar as defined by the Office of Faculty Development. The range for the count is the first day of the faculty appointment calendar of the Fall term, to the last day of the Fall term. The date range used for the Fall 2023 count was 8/7/2023 through 12/20/2023. The postdoc appointment needs to be active at some point during this date range to be counted.

In our testing of 50 sampled postdocs for the Fall 2023 postdoc count, we noted the following:

1. **The Count Instructions and the Postdoc Manual are not aligned with each other. In addition, while discussions were held with FSU Leadership regarding the Count Instructions, no documentation was provided to confirm that the Count Instructions or the Postdoc Manual were formally approved.**

2. **Five (5) employees included in the postdoc count were included in non-postdoc job codes per the Count Instructions. However, no documentation was provided of the Graduate School's communication with the departments confirming the employee was performing postdoc duties.** Some departments will move employees out of a postdoc job code classification to another job code in order to provide benefits to that employee. Currently, FSU does not have a specific job code classification for postdocs with benefits. We were unable to determine whether the employee's job duties remained aligned with those of a postdoc. **One (1) of these employees, a Senior Research Associate, should not have been included in the count due to the nature of the employee's position.**

3. **The Count Instructions do not have mechanisms in place to review the length of time an employee can be counted as a postdoc. Three (3) employees included in the postdoc count were included in the Survey for longer than 7 years, which is not aligned with the NSF guidelines. One (1) of these employees, a Senior Research Associate, was discussed above in #2.** Although the Postdoc Manual states that exceptions are allowed (e.g., due to COVID), the Graduate School does not receive documentation concerning whether these postdocs received a waiver or any other type of exception. The table below identifies the 3 postdocs whose appointments were over 7 years from the start of the Fall 2023 count period (i.e., 8/7/2023).

Employee	Job Code	Job Title	Hire Date	Termination Date
Employee 1	M9189	Postdoctoral Scholar	4/9/2012	9/17/2013
	T004	Researcher	6/24/2019	4/22/2020
	T004/ M9189P/ M9189[4]	Researcher/ Postdoctoral Scholar Non-Exempt/ Postdoctoral Scholar	5/1/2013	12/17/2024
Employee 2 *Note: This employee is also included in #2.*	91659S[5]	Sr Research Associate	12/23/2013	Active
Employee 3 *Note: This employee is also included in #2.*	M9189N	Postdoctoral Scholar Research	7/29/2013	12/31/2017
	9080AS	Research Faculty I	1/1/2018	Active

4. **The Graduate School could not provide documentation regarding the reason for including 1 postdoc in the Fall 2023 count.**
   This postdoc's start day was 1/8/2024, which is outside the Fall 2023 term.

5. **The Graduate School uses the effective date, rather than the termination date (official last day worked) to determine whether the appointment was active during the Fall term.**
   This practice could result in a postdoc being included in the Metric, although they may not have actually worked during the term.

Criteria:

➢ NSF/National Institutes of Health Survey of Graduate Students and Post-doctorates in Science and Engineering
➢ Postdoc Scholar Count Instructions
➢ Handbook for Postdoctoral Fellows.

Causes:

The causes are:

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[4] This employee record began as job code T004 (Researcher) on 5/1/2013, was changed to job code M9189P (Post-doctoral Scholar Non-Exempt) on 8/10/2018, and M9189 (Post-doctoral Scholar) on 2/1/2019.
[5] This employee record began as 91209S (Assoc In) on 8/10/2009, changed to 91669S (Research Associate) on 8/8/2013, and changed to 91659S (Sr. Research Associate) on 12/23/2013.

- The Graduate School's processes for determining the postdoc count are inconsistent with the Postdoc Manual.
- Some postdocs are moved into other job codes for benefits or funding purposes while still performing postdoc duties, which provides challenges in performing the annual count.

Risks/Effects:

Reputational impact due to inaccurate postdoc counts reported.

Recommendations:

- The Graduate School should work with HR to determine a viable course of action concerning postdoc classifications.
- The Graduate School should update the Count Instructions to ensure the correct job codes are listed, proper verification procedures are listed for non-postdoc job codes, and detailed procedures for how the postdoc appointment length is determined and approved. In addition, FSU Leadership should approve the methodology document and any significant changes, including job code changes, to the methodology guidelines going forward.
- The Graduate School should update the Postdoc Manual to align with the Count Instructions. This update should include information regarding any updates to postdoc job codes, as well as prescriptive guidelines defining postdoc conditions, acceptable exceptions, the process for obtaining those exceptions, and who is responsible for approving those exceptions. The updated Postdoc Manual should be approved by FSU Leadership, as well as any significant changes.
- The Graduate School should update the Count Instructions to ensure they have documentation for any employee included in the postdoc count that is considered an exception (i.e., not consistent with FSU's definition).
- The Graduate School should update the Count Instructions to ensure that the termination date at the time of their review is used when identifying active appointments instead of the effective date.

Management's Corrective Action(s):

1. Work with HR to determine a viable course of action concerning postdoc classifications.
2. Codify the Postdoc Scholar Count Instructions as the methodology for generating the NSF Postdoctoral Scholar Survey.
3. Align the language in the Postdoc Manual to be consistent with the Count Instructions.
4. In both the Count Instructions and the Postdoc Manual documents:
   a. Improve operational definitions and conditions and procedures for waivers and exceptions.
   b. Define the timing window parameters associated with the classification of being a Postdoctoral Scholar at FSU in consultation with leadership.
   c. Get Provost approval of final documents.

Name(s) and Title of Employee(s) Responsible for Implementing Corrective Action(s)

Dr. Mark Riley, Dean of the Graduate School

Target Date for Implementing Corrective Action(s):

End of June 2025 prior to the beginning of the Fall 2025 NSF Survey countable period.

APPENDIX A – PREEMINENT RESEARCH UNIVERSITY FUNDING METRICS DATA SOURCES

Metric	Description	Data Source
A	Average GPA and SAT Score for Incoming Freshman in Fall Semester	BOG Submission File – Fall Admissions File
B	Number of Top 50 Public University National Rankings	External Websites - BOG maintains the official list of publications
C	Freshman Retention Rate (Full-time, First Time in College (FTIC))	BOG Submission Files – Fall Student Instruction File (SIF) for two consecutive years
D	Four-Year Graduation Rate (Full-time, FTIC)	BOG Submission Files – Retention File, SIF, and Degrees Awarded File (SIFD)
E	Number of National Academy Memberships	Official Membership Directories on External Websites – BOG maintains a list of acceptable organizations
F	Total Annual Research Expenditures	National Science Foundation (NSF) Higher Education Research and Development (HERD) Survey
G	Total Annual Non-Medical Science and Engineering Research Expenditures	NSF HERD Survey
H	Number of Broad Disciplines Ranked in Top 100 for Research Expenditures	Research expenditure data using the NSF's National Center for Science and Engineering Statistics online data tool
I	Number of Utility Patents Awarded over Three Calendar-Year Period	As reported by the United States Patent and Trademark Office for the most recent three years
J	Number of Doctoral Degrees Awarded Annually	BOG Submission File - SIFD
K	Number of Post-Doctoral Appointees	NSF Survey of Graduate Students and Post-Doctorates in Science and Engineering Survey
L	Endowment Size	National Association of College and University Business Officers (NACUBO) and Commonfund Institute's annual online report of Market Value of Endowment Assets
M	Total Annual Science and Engineering Research Expenditures	NSF HERD Survey

Note: The University of Central Florida is recognized as having Emerging Preeminent status. Meanwhile, Florida State University, Florida International University, University of Florida, and University of South Florida are designated as "*Preeminent Research Universities*".

APPENDIX B – AUDIT RATINGS

Material:
- Violation of policies/procedures/laws and/or unacceptable level of internal controls that either does or could pose an unacceptable level of exposure to the University.
- Issue(s) could have a high impact on the University.
- Major opportunities to improve effectiveness and efficiency exist.
- Immediate corrective action by management is required.

Significant:
- Violation of policies/procedures/laws and/or lack of internal controls that either do or could pose a substantial level of exposure to the University.
- Issue(s) could have a medium impact on the University.
- Substantial opportunities to improve effectiveness and efficiency exist.
- Prompt corrective action by management is essential in order to address the noted concern(s) and reduce the risk(s) to the University.

Moderate:
- Violation of policies/procedures/laws and/or lack of internal controls that either do or could pose a moderate level of exposure to the University.
- Issue(s) identified are either (a) not likely but could have a medium impact on the University or (b) likely and could have a low impact on the University.
- Notable opportunities to improve effectiveness and efficiency exist.
- Corrective action is needed by management in order to address the noted concern and reduce risks to a more desirable level.

Minor:
- Insignificant or immaterial reportable issue(s) or opportunities for improvement were identified during the audit.