FINAL REPORT

California Institute for Regenerative Medicine

2023 PERFORMANCE AUDIT

December 5, 2023

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I. EXECUTIVE SUMMARY

A. BACKGROUND, SCOPE, AND METHODOLOGY

The California Institute for Regenerative Medicine (CIRM, the Organization) is a state agency that funds stem cell research. CIRM's continued funding was established by the passage of Proposition 14: The California Stem Cell Research, Treatments, and Cure Initiative (Prop 14) in November 2020. CIRM is required to commission a performance audit every three years to examine the functions, operations, management systems, and policies and procedures of the agency. Additionally, the performance audit is required to assess the economy, efficiency, and effectiveness in the employment of available resources. Finally, this performance audit addresses policies and procedures for the issuance of contracts, grants, and loans, as well as the protection and treatment of intellectual property rights associated with research funded or commissioned by CIRM.

This performance audit was conducted through interviews, document review, process walkthroughs, and testing, and covers fiscal year 2022–2023.

B. SUMMARY OF FINDINGS AND RECOMMENDATIONS

Findings and recommendations were grouped into four themes: Leadership, Operations, Planning and Program Development, and Human Resources. They are summarized below and presented with greater detail in the Findings and Recommendations section of this report.

		FINDINGS AND RECOMMENDATIONS
		Leadership
1.	**Finding**	Eleven staff members currently report directly to CIRM's Chief Executive Officer (CEO), versus the industry standard of four to six, which presents a risk to the capacity of the executive role.
	Recommendation	Alongside the search for a new CEO, explore organizational structure options to reduce the CEO's span of control and align similar functions.
2.	**Finding**	The Independent Citizens' Oversight Committee (ICOC) is large, comprising 35 members, and meetings are held in a hybrid environment. Both of these factors present potential risk to full board engagement and productivity.
	Recommendation	A. Regularly assess hybrid meeting practices, board member engagement, relationships among board members, and meeting effectiveness to identify opportunities for continuous improvement. Consider implementing procedures to encourage meaningful dialogue in ICOC meetings while balancing the time required to discuss agenda items. B. Continue to leverage committees and working groups to engage board members and conduct in-depth governance responsibilities at the committee level.

FINDINGS AND RECOMMENDATIONS

Operations

3.	**Finding**	Although sampled sole-source procurements complied with CIRM policies, F$SCal system limitations resulted in CIRM inconsistently recording sole-source contracts within the procurement module, leading to opportunities to improve contract recording and enhance transparency in the sole-source contract monitoring process.
	Recommendation	A. Develop a process to ensure sole-source contracts are consistently recorded in F$SCal for reporting purposes. B. As a best practice, the Responsible Administrative Official's biannual report to the Governance Subcommittee and annual report to the Governing Board should be updated to increase transparency in sole-source processes given CIRM's reliance on these contract types.
4.	**Finding**	CIRM's Loan Election Policy, located within the Grants Administration Policy for Clinical Stage Projects, contains refences to outdated information that would impact the terms of a potential loan.
	Recommendation	A. Ensure that the Loan Election Policy is comprehensive and no longer references the outdated CIRM regulation 100801, or update CIRM regulation 100801 to ensure requirements are up to date. B. Replace references to the London Interbank Offered Rate (LIBOR) in CIRM regulations with an alternative benchmark, such as the Secured Overnight Financing Rate (SOFR).
5.	**Finding**	CIRM's monitoring of grantee compliance with technology disclosure requirements, outlined in CIRM's Intellectual Property and Revenue Sharing Requirements for Non-Profit and For-Profit Grantees, continues to be largely ad hoc, which can create risk of noncompliance and negatively impact revenue sharing.
	Recommendation	Continue to submit disclosure surveys to awardees on a recurring basis (e.g., triennially), and consider developing a risk-based audit program to ensure appropriate reporting of technology disclosures.

Planning and Program Development

6.	**Finding**	CIRM is in the process of developing and launching the Patient Support Program (PSP), which has inherent uncertainty related to financial sustainability of the Patient Assistance Fund (PAF), anticipated number of patients served, and program duration.
	Recommendation	As CIRM implements the PSP, it should conduct regular reporting to the ICOC on the number of patients served and average cost per patient as well as develop a data-informed evaluation of the PSP's possible reach and duration.

FINDINGS AND RECOMMENDATIONS

7	**Finding**	CIRM collects considerable amounts of data that is valuable to stem cell and regenerative medicine researchers. However, it has not established a data governance structure or process to collect, compile, or share this data, which would help advance its mission.
	Recommendation	Establish a data governance structure to capitalize on the reporting from grantees and facilitate data sharing capabilities for stem cell and regenerative medicine researchers.
8.	**Finding**	As CIRM revived its operations and added new programs, leadership restructured some functions, which impacted workload distribution within and among teams. This has resulted in elevated workloads for specific groups of employees, which will likely continually evolve alongside CIRM's areas of focus.
	Recommendation	Incorporate a data-driven workload analysis that includes realistic timelines and staffing needs into annual operational planning to promote right-sized workloads among CIRM employees.
9.	**Finding**	The pace of programmatic and operational changes at CIRM has led to challenges for staff in maintaining an understanding of priorities, workstreams, and awareness of agency operations.
	Recommendation	A. Adopt a standardized change management template and promote communication and accountability throughout all change processes. B. Create a culture of deliberate change management to ensure new programs and initiatives are effectively communicated, implemented, and adopted.

Human Resources

10.	**Finding**	CIRM has historically relied on manual and undocumented Human Resources (HR) processes, with minimal employee self-service options.
	Recommendation	A. Continue to pursue HR process automation and employee self-service opportunities through the full integration of BambooHR. B. Document key HR procedures in a centrally available location to ensure accessibility and consistency for CIRM employees.
11.	**Finding**	Limited HR policy documentation, constrained HR personnel, and significant hiring needs following Proposition 14 approval resulted in delayed hiring and inconsistent new employee onboarding and training.
	Recommendation	Develop and document standard operating procedures (SOPs) for hiring and onboarding processes to promote a consistent experience. Where appropriate, differentiate onboarding plans for varying employee types to ensure the provision of appropriate information and training for new employees.

		FINDINGS AND RECOMMENDATIONS
12.	**Finding**	Due to historical compensation practices, pay inequities may have developed between tenured and new employees.
	Recommendation	A. Complete the revision of the compensation policy to prevent future instances of pay inequity. B. In alignment with the new compensation policy, examine existing pay inequities among employees and develop a plan to remedy them as appropriate.
13.	**Finding**	Many CIRM employees question the efficacy and consistent application of the current hybrid work policy, which may hinder productivity and employee morale.
	Recommendation	A. Evaluate the impact of CIRM's work from home (WFH) policy on employee productivity and determine the degree to which it is applied consistently and supports operational goals. B. Consider creating and documenting allowable exceptions to the WFH policy to support consistent application and transparency in how hybrid work is applied across teams.

II. BACKGROUND, SCOPE, AND METHODOLOGY

A. BACKGROUND AND SCOPE

The California Institute for Regenerative Medicine (CIRM, the Organization) is a state agency that was established through the passage of Proposition 71: the California Stem Cell Research and Cures Act in 2004 to fund stem cell research. CIRM's continued funding was secured by the passage of Proposition 14: The California Stem Cell Research, Treatments, and Cure Initiative (Prop 14) in November 2020. CIRM is required to commission a performance audit every three years to examine the functions, operations, management systems, and policies and procedures of the agency. The performance audit assesses the economy, efficiency, and effectiveness in the employment of available resources as well as policies and procedures for the issuance of contracts, grants, loans, and the protection and treatment of intellectual property rights associated with research funded or commissioned by CIRM.

B. METHODOLOGY

This performance audit covered Fiscal Year 2022–2023 and had three areas of focus:

1. Assessing compliance of CIRM policies and procedures with applicable regulations and laws and provisions of Prop 14.
2. Assessing compliance of CIRM processes with its policies and procedures and testing key internal controls.
3. Evaluating functions, operations, management systems, and policies and procedures to determine whether CIRM is achieving economy, efficiency, and effectiveness in the employment of available resources.

Moss Adams assessed compliance with policies and procedures for the core functions of grants application and review, grants oversight, loans, contracts, and intellectual property. Additionally, we assessed CIRM's overall congruence with Prop 14 provisions. Supporting functions within CIRM, such as administration, communications, executive leadership, finance, human resources, information technology, and legal, were also evaluated for economy, efficiency, and effectiveness. The primary techniques used to conduct the performance audit included interviews, document review, process walkthroughs, and testing.

Our work took place between July and December 2023 and consisted of the following four phases:

	PHASE	DESCRIPTION
1	**Startup and Management**	Project startup consisted of collaborative project planning and project management with CIRM, including finalizing our scope of work and work plan.
2	**Fieldwork**	Fieldwork included interviews, document review, and detailed testing. We collaborated with CIRM leadership and staff to obtain the most current information and insights through: • *Interviews* – We conducted interviews with staff and leadership across CIRM to gain an understanding of the Organization's current operating environment.

	PHASE	DESCRIPTION
		• *Document Review* – We reviewed documents including policies, procedures, reports, guides, and other materials to enhance our understanding of CIRM's current state and practices. • *Process Walkthroughs* – CIRM staff demonstrated processes associated with core functions and systems step-by-step for our observation. • *Detailed Testing* – We sampled and tested 25 grants, 20 grant applications and reviews, and 35 contracts to test for compliance with policies and procedures and integrity of core functions, including reviewing for alignment with awards, Prop 14 provisions, and other regulations.
3	Analysis	Based on the information gained during fieldwork, we assessed the current conditions and identified opportunities for improvement. We leveraged best practice information and our own experience from working with similar entities to develop actionable recommendations.
4	Reporting	We communicated the results of our analysis with findings and recommendations, presented first in a draft report that was reviewed with management to confirm the practicality and relevance of recommendations. Feedback gained during the draft report review was integrated into updates before finalizing the report.

C. STATEMENT OF COMPLIANCE WITH GAGAS

We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards (GAGAS). Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

III. COMMENDATIONS

Based on the insights gathered through interviews and document review, it is evident that CIRM has many commendable organizational attributes.

- **Resilient, mission-driven employees:** CIRM staff are driven by the work they do to advance regenerative medicine. Additionally, CIRM's workforce remained resilient through the uncertain time preceding the passage of Proposition 14 and continues to devote itself to the revitalization and expansion of CIRM's mission.

- **Enhanced project and operations management:** CIRM dedicated resources to implement a project management platform (Monday.com) and enhance project management capacity across the agency. Staff across CIRM report that Monday.com was well-received by staff and project manager positions increased workflow efficiency.

- **Strong grants management practices:** CIRM recently completed a grant system assessment, which concluded there was continued value in increasing the functionality of its home-grown Grants Management System (GMS). Leadership in the grants management function is evaluating additional system integration opportunities (e.g., adding project management and document management functionality to the system). CIRM also added three grant management officers when it restructured the grants management team, which helped to balance workloads and enable specialization. Additionally, based on the grant application, review, and close-out testing completed as part of this audit, CIRM fully complied with established policies and procedures during the audit period.

- **Internal service restructuring:** Like the grants management team, the Finance and IT departments underwent restructuring and realignment efforts to clearly define ownership over the pillars defined in CIRM's five-year strategic plan. The revised division of labor within these teams reportedly created a clear sense of roles and responsibilities.

- **Emphasis on diversity, equity, and inclusion:** CIRM demonstrates its ongoing commitment to the core values of diversity, equity, and inclusion (DEI) by incorporating DEI elements into various operational processes. For example, CIRM expanded the reach of its requests for proposals (RFPs) through the Bonfire system, which better enables minority, women, and disadvantaged business enterprises to participate in purchasing opportunities. Additionally, CIRM incorporated additional DEI scoring into its grant application review process for translational and clinical grants. Finally, CIRM's leadership team is highly diverse and includes representation from a variety of backgrounds, cultures, and countries.

- **Investment in streamlined operational reporting:** CIRM launched the Adaptive Insights software, which enhanced reporting functionality and introduced dashboard monitoring capabilities. The operational foresight to identify and implement this system indicates CIRM leaders understand the value of using data to inform strategy development and decision making.

We would like to thank CIRM leadership and staff for their willingness to assist in this performance audit.

IV. FINDINGS AND RECOMMENDATIONS

We prepared a comprehensive set of findings and recommendations, which are presented in four themes: Leadership, Operations, Planning and Program Development, and Human Resources. Our findings are based on input gathered from interviews, document review, and focus groups, as well as comparisons to best practices.

A. LEADERSHIP

CEO Span of Control

1.	**Finding**	**Eleven staff members report directly to CIRM's Chief Executive Officer (CEO), versus the industry standard of four to six, which presents a risk to the capacity of the executive role.**
	Recommendation	**Alongside the search for a new CEO, explore organizational structure options to reduce the CEO's span of control and align similar functions.**

All 11 CIRM leadership team members report directly to the CEO resulting in a flat leadership structure. Given the expanded mission of CIRM under Proposition 14, both Board and leadership team members reported concerns about the capacity and workload of the CEO. Any manager, but particularly an organizational executive, can experience risks to capacity and bandwidth with too many direct reports. During the course of this performance audit, CIRM's CEO resigned; at the time of report finalization, the organization had not yet appointed an interim CEO.

A high number of direct reports at the executive level can affect communication, decision-making, employee development, accountability, and resource allocation. The Society for Human Resource Management (SHRM) emphasizes that decisions on the number of direct reports should be based on organization size, workforce skill level, and manager responsibilities—and that executives tend to have fewer direct reports than other managers in an organization.[1] SHRM benchmarking reports on organizations similar to CIRM list median spans of control for executive-level managers as between four and six direct reports.[2]

CIRM should consider adopting an alternative executive-level organizational structure to reduce the number of staff who report directly to the CEO. There are a number of organizational structures and positions that CIRM could use to accomplish this goal. Many state agencies distribute oversight responsibilities across leadership using a Chief Operations Officer (COO), a Chief of Staff, or an

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[1] Society for Human Resource Management, *What Factors Should Determine How Many Direct Reports A Manager Has?,* Workforce Planning HR Q&As, https://www.shrm.org/resourcesandtools/tools-and-samples/hr-qa/pages/whatfactorsshoulddeterminehowmanydirectreportsamanagerhas.aspx

[2] Society for Human Resource Management, Benchmarking Human Capital Report—Sector: Government, 2022

Society for Human Resource Management, Benchmarking Human Capital Report—Organization Size: Small (2-99 employees), 2022

Society for Human Resource Management, Benchmarking Human Capital Report—Industry: Professional, Scientific, & Technical Services / Communication, 2022

Executive Vice President (EVP) focused on administrative functions or programs. By reducing direct reports, senior leaders can better balance the tactical aspects of management with the time and energy required for broader organizational goals and strategic planning leadership.

As the organization evaluates the reporting structure for the new CEO, it should also consider roles and responsibility distribution between the CEO, Chair, and Vice Chair. Role clarity among key leaders helps support effective collaboration and operational efficiencies.

Independent Citizens' Oversight Committee Meetings

2.	Finding	The Independent Citizens' Oversight Committee (ICOC) is large, comprising 35 members, and meetings are held in a hybrid environment. Both of these factors present potential risk to full board engagement and productivity.
	Recommendation	A. Regularly assess hybrid meeting practices, board member engagement, relationships among board members, and meeting effectiveness to identify opportunities for continuous improvement. Consider implementing procedures to encourage meaningful dialogue in ICOC meetings while balancing the time required to discuss agenda items.
		B. Continue to leverage committees and working groups to engage board members and conduct in-depth governance responsibilities at the committee level.

The passage of Proposition 14 expanded CIRM's governing board, the Independent Citizens' Oversight Committee (ICOC), from 29 to 35 members. The large size of the ICOC enables the governing board to have considerable diversity in its demographic, geographic, and scientific representation. This diversity of representation on the ICOC is a core strength of CIRM's governing board and is intentionally cultivated by the Governance Committee.

By nature, very large governing boards have operational and engagement challenges. As noted in the 2017 and 2020 performance audits, individuals on a large board may feel less personally responsible and therefore less inclined to participate. It can be difficult for officers and committee chairs to meaningfully build relationships with and identify the best roles for such a large number of members. The practical constraints required to maintain a functional governing body can create difficulties for meaningful board member engagement in a large ICOC. For example, if each member spoke for five minutes on an agenda item, that single discussion could last three hours. Board members reported that although discussions are healthy and productive, some members are reluctant to contribute in such a large group. As with any governing board, there is a risk that frequent, loud voices will dominate board discussions. This risk increases as the number of board members grows. CIRM leverages committees and working groups to engage ICOC members and to maximize the utility of individual expertise, which provides opportunities for Board members to contribute outside of full-Board meetings.

Post-pandemic, ICOC meetings are now hybrid, with in-person attendance available if a member chooses. While board members and staff both report increased engagement during the COVID-19

pandemic and effective use of technology, hybrid meetings present their own challenges with engagement and collaboration, requiring intentional leadership to ensure those in the virtual room are equally included in the meeting. Board members must focus intentionally on relationship building in a hybrid, statewide environment. ICOC leadership and CIRM staff can support these efforts.

Continually Assess and Refine Board Practices

Although intentional and continuous management of Board performance and processes is important for any organization with a governing body, the significance and consequences of such performance management is magnified at CIRM due to the large size of the ICOC. The Organization should regularly assess and improve upon its logistical, procedural, and cultural governance practices to promote engagement among the ICOC.

While the responsibilities of corporate and government boards differ, the processes and roles required are similar enough that CIRM can look to Board performance best practices established by the National Association of Corporate Directors (NACD). The NACD outlines three broad strategies for building a high-performance board:[3]

1. Define Optimal Board Culture
2. Reinforce Board Culture and Behavioral Norms
3. Address Major Cultural Fault Lines

The NACD delineates more specific recommendations for building a high-performance Board within these broad strategies, including the following:

- Assess current board culture and intentionally define the desired state
- Periodically evaluate and, when needed, refine board culture
- Clarify the roles and responsibilities of designated board leaders in reinforcing desired board culture
- Assign primary ownership of board culture-related processes to the Governance Committee[4]
- Commit to addressing unproductive behaviors and dynamics (group or individual)

CIRM should regularly assess its Board practices to promote effective governance. Although the primary responsibility for assessments and refinements should likely reside in the Governance Committee, roles and responsibilities can be delegated to best fit the needs of CIRM and the members of the ICOC. The Board, with support from CIRM staff, should regularly assess ICOC processes and practices, including the degree of board member engagement, the interplay between engagement and hybrid meeting structure, and member engagement. The Governance Committee should consider whether any additional Board procedures or values should be adopted to encourage meaningful dialogue and participation from stakeholders, while still balancing the need for efficiency and addressing all issues within limited timeframes.

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[3] National Association of Corporate Directors, *Culture as the Foundation: Building a High-Performance Board*, NACD Blue Ribbon Commission Report, 2023

[4] The NACD best practices recommend also assigning ownership to a nominating committee, which would be irrelevant to CIRM

Ensure Resilience of Committees and Working Groups

Smaller committees and working groups are essential to effective performance in a 35-member Board. In interviews, Board members reported that committees and working groups are highly productive, operate well, and advance the mission of the agency. CIRM should continue to leverage these committees and working groups by providing opportunities for members to contribute in smaller, more manageable sub-groups of Board members.

CIRM should ensure that committees and working groups remain effective and resilient. CIRM already leverages many best practices, such as clarifying the role of committees or working groups, their leaders, and promoting member engagement. This allows the ICOC to use the expertise of its members strategically without requiring lengthy discussions at the full board level.[5] CIRM should also ensure that there is a clear succession plan for every committee Chair and working group leader, ensuring that these vital sub-groups remain functional if there is Board member turnover.

B. OPERATIONS

Sole-Source Contract Management

3.	Finding	Although sampled sole-source procurements complied with CIRM policies, F$SCal system limitations resulted in CIRM inconsistently recording sole-source contracts within the procurement module, leading to opportunities to improve contract recording and enhance transparency in the sole-source contract monitoring process.
	Recommendation	A. Develop a process to ensure sole-source contracts are consistently recorded in FI$Cal for reporting purposes. B. As a best practice, the Responsible Administrative Official's biannual report to the Governance Subcommittee and annual report to the Governing Board should be updated to increase transparency in sole-source processes given CIRM's reliance on these contract types.

Based on our review of the total population of 187 contracts, there were 28 agreements over the solicitation threshold of $100,000 and 13 agreements of those agreements, or 46%, were not competitively bid. We inquired about the reporting of sole-source contracts, in alignment with best practices, and CIRM confirmed several of the contracts were competitively bid; however, due to system limitations within FI$Cal, CIRM was unable to consistently record the contracts as competitively-bid within the FI$Cal procurement module. Specifically, CIRM leadership noted the institution submitted a request to FI$Cal for an update to the procurement module to permit competitive-bid justification aligned with CIRM's policy; however, FI$Cal was unable to grant this request. As a result, CIRM updated the comments within the FI$Cal procurement module for 6 of the 13 sole-source contracts (46%), to note the contracts were competitively bid. Therefore, 7 of the 28

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[5] National Association of Corporate Directors, *Culture as the Foundation: Building a High-Performance Board*, NACD Blue Ribbon Commission Report, 2023

agreements over the solicitation threshold of $100,000, or 25%, were not competitively bid. Current sole-source policies require documentation of the justification if the agreement is $100,000 or more and competitive proposals have not been solicited. Although all sampled files complied with policies, based on our experience, reporting and monitoring controls could be improved to report sole-source justification on a regular basis (e.g., quarterly) to appropriate stakeholders (e.g., Governance Subcommittee).

CIRM should consider enhancing sole-source policies and procedures to include reporting sole-source justification to appropriate stakeholders on a recurring basis. Considering CIRM's reliance on sole-source-funded contracts, senior leadership should be informed to support decision making if vendors are unable to deliver contracted goods or services. Additionally, CIRM should update its procedures to ensure all contracts are recorded consistently within the FI$Cal procurement module to indicate that it was a sole-source procurement.

Loan Election Policy

4.	Finding	CIRM's Loan Election Policy, located within the Grants Administration Policy for Clinical Stage Projects, contains refences to outdated information that would impact the terms of a potential loan.
	Recommendation	A. Ensure that the Loan Election Policy is comprehensive and no longer references the outdated CIRM regulation 100801, or update CIRM regulation 100801 to ensure requirements are up to date. B. Replace references to the London Interbank Offered Rate (LIBOR) in CIRM regulations with an alternative benchmark, such as the Secured Overnight Financing Rate (SOFR).

There were no grants converted to loans in fiscal year 2022–2023. However, in our review of CIRM's Grants Administration and Loans Administration policies, we identified references to outdated information that would impact the terms of a potential loan. Section IV of the Grants Administration Policy for Clinical Stage Projects details the stipulations for how Awardees can elect to treat Awards as Loans. Section IV.C of the Grants Administration Policy for Discovery, Translation, and Education Projects references the above section, referring to it as the Organization's "Loan Election Policy."

Policy References

Within the Loan Election Policy portion of the Grants Administration Policy for Clinical Stage Projects, section IV.C.(4) states that "An Awardee that elects to treat its Award as a Loan shall be subject to CIRM regulation 100801" (Cal. Code Regs. tit. 17 § 100801). This policy outlines several details relating to a loan's treatment and handling, including how interest rates will be determined, reporting requirements, loan transfer policies, loan suspension and forgiveness, and conditions for extensions. However, CIRM staff indicated that regulation 100801 is defunct, as it relates to a loan program that has not been used in a decade and is de facto discontinued.

CIRM staff should ensure that the loan election policies within both grants administration policies are comprehensive, including all information necessary to conduct and manage loan conversions. There are two ways in which this could be accomplished: 1) Update the Grant Administration Policy to

include additional information on loan practices that are currently included in the Loan Administration Policy and remove the reference to CIRM regulation 10080; or 2) Update regulation 100801 to reference current operational practices that concern grant-to-loan conversions.

Interest Rate Determination

The Loan Election Policy in the Grants Administration Policy for Clinical Stage Projects and/or the Loan Administration Policy should be updated to reflect current interest rate benchmarks. Section VII.B of the Loan Administration Policy and Section IV.C of the Grant Administration Policy for Clinical Stage Projects both provide similar guidance on how interest rates are determined for CIRM loans. For example, "The interest rate for a 5-year loan term shall be LIBOR plus 2%." LIBOR is an interest rate average calculated from estimates submitted by leading banks in London and has historically served as a benchmark for short-term interest rates. As of July 1, 2023, US Dollar LIBOR ceased. The United Kingdom's Financial Conduct Authority will continue to publish a synthetic US dollar methodology until September 2024, at which point LIBOR will permanently be discontinued.[6]

CIRM should revise its Loan Administration Policy and/or Grant Administration Policy for Clinical Stage Projects so that it uses an alternative benchmark for interest rates. The Organization should consider, and has already expressed interest in, utilizing the Secured Overnight Financing Rate (SOFR), which federal agencies and the federal reserve have designated as an appropriate replacement for LIBOR.[7] Ensuring these policies reference an appropriate benchmark for interest rates is critical for any future loans issued by CIRM.

Intellectual Property

5.	Finding	CIRM's monitoring of grantee compliance with technology disclosure requirements, outlined in CIRM's Intellectual Property and Revenue Sharing Requirements for Non-Profit and For-Profit Grantees, continues to be largely ad hoc, which can create risk of noncompliance and negatively impact revenue sharing.
	Recommendation	Continue to submit disclosure surveys to awardees on a recurring basis (e.g., triennially), and consider developing a risk-based audit program to ensure appropriate reporting of technology disclosures.

In fiscal year 2022–2023, there were 11 total technology disclosures. We reviewed three of these for compliance with CIRM policies and procedures. Based on testing, there were no exceptions.

There are ongoing opportunities to improve processes and controls around technology disclosures to support more efficient and effective compliance monitoring. These opportunities were previously

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[6] US Securities and Exchange Commission Investor Alerts and Bulletins, "What You Need to Know About the End of LIBOR," May 1, 2023, https://www.sec.gov/oiea/investor-alerts-and-bulletins/what-you-need-know-about-end-libor-investor-bulletin#:~:text=Replacing%20LIBOR&text=The%20publication%20for%20one%2Dweek,for%20an%20alternative%20benchmark%20rate .

[7] Federal Reserve Press Release, "Federal Reserve Board Federal Reserve Board adopts final rule that implements Adjustable Interest Rate (LIBOR) Act by identifying benchmark rates based on SOFR (Secured Overnight Financing Rate) that will replace LIBOR in certain financial contracts after June 30, 2023," December 15, 2022, https://www.federalreserve.gov/newsevents/pressreleases/bcreg20221216a.htm

identified in the fiscal year 2019–2020 performance audit. CIRM grants management personnel work closely with grantees while grants are active to confirm whether any technology disclosures must be made. However, certain grantees are not proactively complying with CIRM disclosure regulations and require additional follow-up from CIRM. To promote grantee compliance with public disclosure requirements, CIRM issued disclosure surveys to Translational (TRAN) Research, and Clinical (CLIN) Trial Stage grant awards recipients in Spring 2023. These surveys requested grantees to disclose any revenue received or licenses reported for their respective awards. CIRM personnel reported survey responses provided clarity on awardee activity and identified additional publication and technology disclosures. Because CIRM's Patient Assistance Fund (PAF) receives revenue from grantee royalties, grantee adherence to technology disclosure requirements is crucial for long-term viability of the PAF.

To promote grantees' continued transparency, CIRM should continue to submit disclosure surveys to awardees on a recurring basis (e.g., triennially) and consider developing a risk-based audit program to ensure appropriate reporting of technology disclosures. To help define this risk-based audit program, CIRM should consider the key risk assessment principles as identified by the Government Accountability Office (GAO)[8], which includes:

- Developing clear objectives to enable the identification of risks and risk tolerance levels
- Identifying, analyzing, and responding to risks related to achieving defined objectives
- Considering the potential for fraud
- Identifying and assessing changes that could significantly impact the internal control system (e.g., processes in place to ensure accurate and timely reporting disclosures)

Based on these factors, CIRM can develop a scoring rubric that evaluates and factors in the likelihood of each risk occurring, the potential impact, and priorities for CIRM. Awards can then be scored using this rubric to reflect high, medium, and low risk awards. CIRM's ongoing work related to business intelligence can present an opportunity to streamline these reviews and risk rankings based on identified risk factors. This creates a framework to encourage compliance among awardees, while also balancing the need for compliance with workloads among both CIRM staff and awardees.

C. PLANNING AND PROGRAM DEVELOPMENT

Patient Support Program Development

6.	Finding	CIRM is in the process of developing and launching the Patient Support Program (PSP), which has inherent uncertainty related to financial sustainability of the Patient Assistance Fund (PAF), anticipated number of patients served, and program duration.
	Recommendation	As CIRM implements the PSP, it should conduct regular reporting to the ICOC on the number of patients served and average cost per patient as

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[8] Government Accountability Office: Standards for Internal Control in the Federal Government

CIRM grantees have revenue sharing requirements for the funds they receive from licensing of, or royalties from, inventions or technologies that arise from CIRM-funded research. Proposition 14 requires that these revenues be deposited into an interest-bearing account and spent on "offsetting the costs of providing treatments and cures arising from institute-funded research to California patients who have insufficient means to purchase such treatment or cure, including the reimbursement of patient-qualified costs for research participants." The Proposition specifically lists patient expenses such as medical expenses, lodging, meals, and travel for research participants and their caregivers. In response to this requirement and the receipt of a lump sum settlement, CIRM established the Patient Assistance Fund (PAF). As of June 30, 2023, the PAF had a balance of $15,994,455, with the vast majority (97.5%) of this balance coming from one piece of technology.

CIRM has spent considerable time in the last year and a half to develop the PSP. The PSP promotes CIRM's goals to advance regenerative medicine, encourage complete clinical trials, and enhance accessibility to CIRM-funded clinical trials for underserved populations. According to the PSP Concept Plan, which was approved at the March 28, 2023, ICOC meeting, the PSP is the mechanism CIRM intends to use to deploy the PAF. The objective of the PSP is to "provide financial and logistical support to all patients being evaluated or enrolled in CIRM-supported clinical trials to improve access, enrollment, and retention in clinical trials with an emphasis on underserved populations." These services include factors such as clinical trial navigation and evaluating patient/family needs for financial support to participate in CIRM-funded clinical trials, such as logistical and travel support.

Because the PSP is a new CIRM initiative, there is uncertainty around how many patients will be supported by the program, some program mechanisms and allowable expenditures, and the program's long-term financial sustainability. However, the agency currently lacks sufficient data to respond to these questions until the program is underway.

Members of the ICOC reported uncertainty surrounding the financial health of the PSP, partly due to limited patient data available. As noted previously, the PAF was established to use licensing and royalty payments to support access and affordability measures; however, this means that ongoing deposits to this fund are uncertain. As CIRM begins to launch the PSP, it should take into consideration how PAF funding will be crucial for long term success and achievement of accessibility and affordability goals, particularly as the number of CIRM-funded clinical trials increases. After the PSP is operational for a year, CIRM can proactively assess data, such as the number of patients that participated in the program, the average cost per patient, and average duration of trials to create an understanding of the PSP's potential reach and longevity. This information should be combined with forecasted clinical trial awards to develop projections that will help inform whether the PAF fund balance is sufficient to support patients participating in CIRM-funded clinical trials or whether alternative options (e.g., finding additional funding sources or prioritizing reimbursements) may need to be considered.

Data Governance and Infrastructure

7.	Finding	CIRM collects considerable amounts of data that is valuable to stem cell and regenerative medicine researchers. However, it has not established a

Recommendation	data governance structure or process to collect, compile, or share this data, which would help advance its mission.
Recommendation	Establish a data governance structure to capitalize on the reporting from grantees and facilitate data sharing capabilities for stem cell and regenerative medicine researchers.

Many leaders and stakeholders at CIRM identified data collection, data analysis, and data sharing as crucial to its mission as a leader in regenerative medicine. However, staff reported that CIRM has not yet developed a business intelligence strategy, and questions remain as to the purpose, role, format, storage, and impact of data collection efforts. For example, CIRM introduced DEI data collection to clinical trials and educational programs in 2021 and science officers became responsible for ensuring grantees implemented DEI plans in alignment with their applications. While DEI data is anticipated to be available soon, staff are unsure who is responsible for managing and governing the data infrastructure and security necessary to manage this data. Additionally, CIRM has not yet established processes to enable the use of DEI-related data to inform and improve decision-making.

CIRM collects significant data from its grantees, which could help further advance regenerative medicine research if thoughtfully collected, organized, and made available to researchers. However, CIRM has not yet established a data governance process, including roles, responsibilities, and infrastructure. Several leaders across the Organization have indicated the need to establish data governance and a data sharing network in alignment with CIRM's mission of advancing world class science.

CIRM should establish a formal data governance structure to promote the effective utilization of its wealth of data. Federal Enterprise Data Resources recommend the establishment of a data governance body, an organizational team that is tasked with establishing and maintaining the policies, procedures, and frameworks for data governance. In determining who would constitute this data governance body, CIRM leaders should ensure that these members have or can be given the sufficient organizational authority to integrate data governance decisions into agency operations to ensure that data practices can meet stakeholder needs.[9]

CIRM should task its data governance body with the establishment and maintenance of policies, procedures, roles, responsibilities, and other structures to ensure the effective performance of the six key activities of data governance, as delineated by the federal Data Governance Playbook:[13]

1. **Data identification:** The inventory of all data assets
2. **Data management policies:** The rules for governing the creation and use of data
3. **Data issue management:** Formalized processes for recognizing and remedying any barriers to effective use of data
4. **Data assessment:** Processes that assess the quality and utilization of data
5. **Data oversight:** Continuous oversight and improvement of data
6. **Data communications:** Structures that facilitate appropriate communications between stakeholders to improve the use of data

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[9] Data.gov Program Management Office, *Federal Data Strategy: Data Governance Playbook*, July 2020, https://resources.data.gov/assets/documents/fds-data-governance-playbook.pdf page 5

Accessibility of data related to regenerative medicine will help further CIRM's mission by enabling researchers to access additional information that can inform their studies.

Workload Assignment Balance

8.	Finding	As CIRM revived its operations and added new programs, leadership restructured some functions, which impacted workload distribution within and among teams. This has resulted in elevated workloads for specific groups of employees, which will likely continually evolve alongside CIRM's areas of focus.
	Recommendation	Incorporate a data-driven workload analysis that includes realistic timelines and staffing needs into annual operational planning to promote right-sized workloads among CIRM employees.

Following the approval of Proposition 14, CIRM leadership had to revive many existing programs that suffered staffing losses during the agency's wind-down as well as stand up new programs that were listed in the ballot language. Additionally, CIRM continues to evolve its areas of focus, including a designated investment in diseases that impact the brain and central nervous system and renewed focus on clinical trial infrastructure to advance research that provides enhanced access to treatments throughout California.

Many of CIRM's teams have been staffing up over the last several years. In the interim, employees have experienced elevated workloads to move work forward with limited staffing and to dedicate additional time to new employee onboarding. Extending work responsibilities of employees can be warranted, especially during times of growth, though it is important to consider employees' current workload; the roles they play, such as in supervising and mentoring staff; and overall capacity to maintain a sustainable balance. Adding responsibilities without adjusting other areas of work can lead to employee burnout, inefficient execution of duties, and mistakes.

As the ICOC evaluates potential growth and focus areas for CIRM's grant awards, leadership should continually reassess the staffing needs to support those programs. This is particularly important given the cap on the number of personnel (85 FTE) CIRM can have, as listed in Proposition 14.

Performing a workload analysis can provide insight for operational planning, right-sizing teams, and workload distribution. Considering the personnel constraint imposed by Proposition 14, data from the analysis will be beneficial for highlighting opportunities to streamline operations or better use current team members. Additionally, the information gathered can be used to inform and align decision making to overarching strategic goals and focus areas. Workload analyses typically involve the following steps:

- **Identify roles and work activities:** After determining relevant roles or focus areas to be analyzed, leadership collaborates with staff to create a comprehensive list of major activities. In this case, activities might include steps within the grant review and approval process. Other key activities including personnel management, supervising, training, and administrative duties should also be taken into consideration.

- **Estimate time for work activities:** Using a worksheet that lists each major activity identified, staff track their time spent on the activity over the course of two to four weeks. It can also be

helpful for staff to report the tasks they were unable to accomplish during the timeframe due to bandwidth constraints.

- **Analyze activities:** Once tracked, the data can be aggregated to provide a sense of overall workloads across teams, time associated with specific tasks or case types, activity gaps, and opportunities for personnel development to foster responsibility reassignment.

- **Take action:** Once the analysis is complete, it should provide actionable data about areas of success, workload challenges, and staffing gaps. The resulting data should calibrate leader expectations of their respective team capacity and serve as a baseline for goal setting and sourcing adequate resources. Revised understanding of realistic processing timelines should also be incorporated as key performance indicators for staff. CIRM's annual operational planning and department-specific plans should account for conclusions drawn from the data to ensure efficient, equitable distribution of work. When using key takeaways to inform workload adjustments, leaders should be mindful of staff capacity and ensure assignments of new tasks are adequately counterbalanced with a proportionate scaling down of existing responsibilities within staffs' work portfolios.

Although performing a workload analysis as outlined above provides information about potential resource needs, it does not take the quality of work into consideration. As such, it should not be used as a stand-alone metric, but rather as part of a wider conversation around staff capacity and team performance. As CIRM continues to adjust its structure and finds a good balance among teams, it can carry workload analyses in tandem with the budgeting, projection, and workload planning practices already in place at the agency. Through these measures, CIRM can work towards maintaining employee morale and ensuring workloads remain sustainable and balanced with employee appreciation and recognition. Appendix B includes a sample workload analysis worksheet.

Change Management and Internal Communication

9.	Finding	The pace of programmatic and operational changes at CIRM has led to challenges for staff in maintaining an understanding of priorities, workstreams, and awareness of agency operations.
	Recommendation	A. Adopt a standardized change management template and promote communication and accountability throughout all change processes.
		B. Create a culture of deliberate change management to ensure new programs and initiatives are effectively communicated, implemented, and adopted.

After the passage of Proposition 14, CIRM leadership implemented significant changes to its programs and operations to align with the proposition's goals. The pace and degree of these changes have made it difficult for employees to keep up with the agency. Some staff feel that rapid, top-down decisions were not thoroughly explained and that inadequate transparency and communication prevented effective change management and implementation. Many teams reported that there was no clear vision communicated for (1) new positions and programs and (2) how work should be performed within and across teams. For example, staff reported initial restructuring of roles among some teams was unclear, leading to confusion over task ownership and disparity in task distribution. However, improvements have been made to improve clarity in roles and responsibilities over the past

several months. Additionally, insufficiently documented HR procedures (see Finding 10) have also complicated staff experiences with rapid organizational change. Because many HR processes are currently not formalized, some department leaders experienced complications and confusion as they worked to hire new employees.

Intentional change management, including communication about the need for change and employee education, will be crucial to support long-term adaptability and successful change implementation. As organizations evolve, it is typical for staff to struggle with operational and structural changes that are necessary for continued success. Absent robust change management protocols, attempts at change may not be effectively implemented or maintained and lead to increased difficulty in securing leadership and staff buy-in over time. Additionally, change can be especially challenging when workloads are high and supporting change implementation creates additional work, such as through dedicating time to training and adoption of new processes.

To improve the success of ongoing change initiatives, CIRM should establish a change management framework that actively engages and sets clear expectations for key stakeholders, communicates the need for and impact of change, and supports accountability for adopted changes. Staff who understand the challenges within current practices and proposed benefits of forthcoming changes are more likely to buy into and adhere to changes and new processes. By including employees across the agency in discussions to gather feedback surrounding current practices and ongoing changes, CIRM can increase visibility over the need for, and potential benefits of, changes driven by its leaders.

Often, employees facing change experience fear and confusion; therefore, a robust change management approach should emphasize the human side of change to promote employee adoption. By acknowledging employee feelings and concerns, leadership can demonstrate its support of CIRM employees and improve overall change management efficacy. The following are key elements for implementing successful change management.

- **Actively align CIRM leadership:** The first element of change management is defining the purpose of making a change. This should be well-defined and understood by the leadership team. After the decision to make a change is made—whether it occurs at an enterprise or departmental level—the Leadership Team's primary responsibility is to ensure there is alignment and understanding across all departments. Although a change may not result in significant improvements for every department, the organizational alignment process presents an opportunity to exercise enterprise-wide thinking and consider the impact of the change on other facets of the Organization. Without alignment and commitment, any change management initiative is likely to falter.

- **Communicate the need for change:** Excellent communication is critical to change management. Affected employees should be aware of the business need for change and buy into potential solutions. Leadership should build awareness around the Organization's needs and the risk in remaining with the status quo. Where appropriate, impacted stakeholders should be involved in defining initiative requirements and the design process. Leaders should ensure clear and open lines of communication throughout the change management process and advocate for two-way dialogue to provide answers and reassure stakeholders.

- **Plan for and understand the ramifications of the change:** Clearly identify what is changing, how it is changing, who will be affected, how users will be affected, and when the change will occur. Change should occur in a multi-step, well-communicated process that includes ample training and no surprises to staff. Key communication messages should be developed and

disseminated regularly to ensure staff are aware of progress towards implementation and reminded of personal benefits they can expect to derive from the change. Depending on the nature of the change, leadership may also need to plan for negative ramifications of the change that impact employee morale and provide consistent messaging and support in change adoption.

- **Consider and design a method for staff education:** Throughout implementation, build staff knowledge and abilities through training opportunities. Training should focus on clear assignment of roles and responsibilities and highlight the intention behind changes, the importance of adherence and the anticipated, improved results. Following implementation, provide reinforcement and allow employees to provide feedback on the change and change process, making minor adjustments where necessary. Ensure consistent adoption by updating and accessibly storing policies, procedures, and documented performance measures that reflect implemented changes and can serve as staff resources.

To increase the Organization's capacity for effective change management, CIRM should consider providing change management and communication training to its leadership team. This can increase individual knowledge and capacity to manage change, as well as provide institutional leaders with a commonly understood language to identify, discuss, and strategize around change management challenges. Over time, continued discussions and application of the framework can shift CIRM's culture to one invested in open communication and a collective pursuit of improvement. Sample change management templates are provided in Appendix C.

D. HUMAN RESOURCES

Human Resources Processes

10.	Finding	CIRM has historically relied on manual and undocumented Human Resources (HR) processes, with minimal employee self-service options.
	Recommendation	A. Continue to pursue HR process automation and employee self-service opportunities through the full integration of BambooHR. B. Document key HR procedures in a centrally available location to ensure accessibility and consistency for CIRM employees.

Historically, many CIRM HR functions have been undocumented and reliant on manual processes. Consequently, many staff reported difficulties with HR processes, encountering situations or needs with no clear or documented path to resolution. Additionally, HR functions have been typically processed manually in an ad hoc fashion, furthering confusion among staff and increasing the potential risk for error, as well as noncompliance with state and federal employment laws. For example, leave requests are submitted and approved via email. Some department leaders reported the need to develop and conduct their own employee evaluation processes, which were completed on paper rather than in a system. Inefficient and manual processes have impeded CIRM's ability to support and invest in its greatest assets—its employees.

Process Automation, Design, and Standardization

Under new leadership and renewed investment, the HR department is currently working to improve its operations and the internal services offered to CIRM employees. A notable ongoing improvement

effort is the implementation of BambooHR, the Organization's new Human Resources Information System (HRIS), which provides opportunities for process automation and employee self-service options.

CIRM should continue its ongoing efforts to use its HRIS to increase efficiency and standardization. Although the exact functionalities of an HRIS will vary by vendor and organization, the Society for Human Resources Management (SHRM) describes notable opportunities for efficiency and effectiveness improvements through HRIS implementation, including:[10]

- **Cost reduction via automation:** Impacts benefits administration, recruiting, training, payroll, and performance management
- **Improvements to the quality and speed of services:** Improves centralization of HR data, compensation management (see also Recommendation 13), easily accessible services for out-of-office staff, and professional qualification and training tracking
- **Improved reporting and analytics:** Enhances standardization, automation, and cadence of analysis and reports

CIRM leadership and HR staff should continue work to ensure that BambooHR is fully implemented and integrated into organizational processes and cultural expectations, with particular emphasis on how this system can improve employee experience within HR processes that are currently manual and burdensome. SHRM notes that the implementation period of HRIS software is an opportune time for organizations to overhaul HR processes to better serve staff, since some form of process redesign is likely already necessary to align staff efforts with the software.[11] These process redesigns create opportunities for HR standardization across the Organization.

HR Policy and Procedure Documentation

Human Resources leadership has expressed dedication to the documentation of HR policies and SOPs to promote business continuity. Policies and procedures help employees understand expectations and perform HR processes consistently across departments and time. Additionally, policies and procedures support operational continuity during instances of employee turnover. Without well-documented, current, and accessible policies and procedures, employees may inadvertently complete HR tasks incorrectly and in a way that violates CIRM expectations. Clear HR policies also bring awareness to available tools and templates for efficiently carrying out HR duties and functions.

As processes are redesigned, standardized, and are integrated with BambooHR, HR staff should document these policies and procedures in a central location, such as an intranet. Clear documentation and accessibility of HR policies and procedures promotes fidelity to organizational expectations and improves consistency of employee experience across the Organization.

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[10] Society for Human Resources Management, "Designing and Managing a Human Resource Information System," SHRM Toolkits, https://www.shrm.org/resourcesandtools/tools-and-samples/toolkits/pages/managingahumanresourceinformationsystem.aspx

[11] Richard D. Johnson and Hal G. Guetal, *Transforming HR Through Technology: The Use of E-HR and HRIS in Organizations*, Society for Human Resources Management, 2011

New Employee Hiring and Onboarding

11.	Finding	Limited HR policy documentation, constrained HR personnel, and significant hiring needs following Proposition 14 approval resulted in delayed hiring and inconsistent new employee onboarding and training.
	Recommendation	Develop and document standard operating procedures (SOPs) for hiring and onboarding processes to promote a consistent experience. Where appropriate, differentiate onboarding plans for varying employee types to ensure the provision of appropriate information and training for new employees.

Following voter approval of Proposition 14, CIRM initiated a significant amount of employee hiring to fill both newly established and vacant positions. Due to limited HR capacity, CIRM added a temporary employee to support hiring efforts. However, hiring managers reported that hiring processes, decision-making authority, and timelines are sometimes unclear. Although positions are approved to be hired, there were instances of approved positions being put on hold even after candidates were identified and vetted. This resulted in the loss of strong candidates that would support the work of CIRM and help to balance elevated workloads among teams.

There remain opportunities to improve transparency, communications, and timeliness throughout the hiring process. CIRM should develop formalized SOPs that detail the hiring process, including key steps and any necessary approvals. Typically, institutions have processes in place for both new position creation and filling vacant positions. These processes include requirements for position approval or automated approval for vacant positions to be re-filled. Given the demands on existing staff and evolving nature of CIRM's operations, HR should work with CIRM leadership to define hiring practices and authority over hiring decisions to promote timely processes.

Onboarding

Interviewed staff reported that new employee training and onboarding is conducted inconsistently across CIRM and presents additional work for employees and managers. Rather than focusing solely on job-specific training, programmatic employees have been responsible for basic onboarding for their newly hired peers due to capacity constraints in the HR department. These onboarding responsibilities can be particularly difficult for teams without long-tenured staff as they have limited institutional knowledge to share. This makes it challenging for new employees to learn their role effectively and efficiently It also impacts tenured employees' ability to adequately coordinate with newer employees. Some staff reported delays that pushed their onboarding three to four months from their original start date. Without a standardized approach for new employee onboarding and training, CIRM faces succession planning and operational continuity risks. These risks are elevated in cases where a department experiences significant turnover or if CIRM is hiring staff for a newly created function.

To bring consistency to the new employee experience, CIRM should develop and document onboarding SOPs that ensure communications with new employees are consistent, that sufficient training to fulfill their duties is provided, and that supervisors (or designee) appropriately introduces them to their job, workplace culture, operational activities, and key partners across the agency. Effective onboarding is particularly important for CIRM because new employees may be transitioning

to state employment from the private sector and may not understand how expectations and operations for a state agency vary from their previous experiences.

Comprehensive onboarding practices can help reduce new employee anxiety by equipping them with the contextual information they need to fulfill responsibilities and ensure coordinated project work is done. A complete onboarding experience also reduces manager and peer time needed to answer questions, explain processes, and clarify issues for new employees. Engaging new employees at the start of their employment helps them to adapt to CIRM's culture, norms, and work processes, which results in enhanced productivity. As CIRM develops procedures to bolster its new hire onboarding experience, it should ensure the program includes the following components:

1. **General orientation:** This applies to all employees and covers basics such as personnel, payroll, benefits, and employee rights. The general orientation packet provided to new employees should include the required paperwork, employee handbook, benefits information, personnel directory, training materials, and office equipment instructions.

   During the general orientation, employees should be introduced to the mission and values, taken on a tour of the office, and walked through important procedures such as time entry. Developing a consistent orientation process for all new employees helps to establish and reinforce an organized and people-centric workplace culture. This orientation should also cover key elements of state employment that many new CIRM employees may not be familiar with.

2. **Job-specific onboarding:** This is different for each new employee and applies to their specific responsibilities and relevant policies and procedures. Available policies, procedures, and training documentation can be leveraged to develop onboarding templates for each group or position level. The onboarding process should address a ramp-up period, during which employees acclimate to the Organization and strive to fulfill their responsibilities independently.

   Many organizations assign mentors or peer buddies to provide guidance to new employees. The experienced staff assigned function as a built-in knowledge center for new employees and help to maximize assimilation and productivity.

   Job-specific onboarding should include introductions to colleagues in other departments and process walkthroughs with supervisors and peers. Meetings should be scheduled within the first week of employment and supplemented with documentation in the job-specific orientation packet. While this part of the orientation will vary from team to team, efforts from managers and other leaders to develop templates for full orientation materials can reinforce and streamline CIRM's talent acquisition process.

A well-designed employee onboarding program supports strong employee engagement, trust with peers and supervisors, and open communication, and provides support for adapting to a new work environment. Overall, onboarding provides an opportunity to perpetuate cultural transformation. Appendix D includes a sample orientation program with checklist and onboarding plan.

Employee Compensation

12.	Finding	Due to historical compensation practices, pay inequities may have developed between tenured and new employees.
	Recommendation	A. Complete the revision of the compensation policy to prevent future instances of pay inequity.
		B. In alignment with the new compensation policy, examine existing pay inequities among employees and develop a plan to remedy them as appropriate.

CIRM's compensation policy states that a Cost of Living Adjustment (COLA) based on the Consumer Price Index – California (San Francisco Oakland San Jose) for eligible salary levels may be offered annually; however in practice, COLAs historically were not provided on an annual basis. Additionally, the compensation policy states that the salary range adjustment in response to the COLA will not result in an automatic increase for an employee unless their compensation falls below the new minimum of the salary range. As a result, existing employees remained at the lower end of the salary range while new employees could potentially be compensated at a higher amount. Equity in compensation among staff is important to maintain a working environment conducive to talent development and retention. Pay inequities, both real and perceived, can erode employee trust in their employer, reduce productivity, and encourage employees to seek out other employment opportunities. Quantifying a ratio of employee salaries as a percentage of the median salary in the respective range to years of service can highlight key candidates for pay adjustments. The HR Director is currently evaluating potential pay inequities that have resulted from these compensation practices and is in the process of revising the compensation policy.

When addressing identified necessary pay adjustments, it will be important for CIRM to communicate the context and rationale of the change to the affected employees. By being transparent about the adjustment, CIRM can emphasize its investment in its employees and how policy adjustments will be applied to mitigate the risk of future pay inequities.

To prevent recurrence of pay discrepancies, CIRM should revise its compensation policy as well as incorporate pay transparency and pay equity goals.

- **Pay transparency:** Employees should be provided with clear information about their pay; the factors that influence it; and when, in what frequency, or under which circumstances it will be reviewed. Equipping CIRM employees with this knowledge can foster a sense of career ownership and provide them with a sense of direction for improvement.

- **Pay equity goals:** CIRMs should establish goals related to pay equity. Goals can include maintaining specifically defined quantitative metrics or ratios, and the provision of pay equity training to managers and employees. Uniform understanding of the importance of equitable compensation practices across the Organization can provide a common language for employees to discuss pay-related topics and bring awareness to potential biases that exist when making decisions that impact employee compensation. A culture that acknowledges the importance of pay equity can also encourage appropriate dialogue and transparency in compensation determinations.

This policy should adhere not only to best practices, but also to State of California regulations.

Hybrid Work Policy

13.	Finding	Many CIRM employees question the efficacy and consistent application of the current hybrid work policy, which may hinder productivity and employee morale.
	Recommendation	A. Evaluate the impact of CIRM's work from home (WFH) policy on employee productivity and determine the degree to which it is applied consistently and supports operational goals. B. Consider creating and documenting allowable exceptions to the WFH policy to support consistent application and transparency in how hybrid work is applied across teams.

CIRM's hybrid work policy requires employees to work at least three days per week in the office. Staff reported that this policy is not uniformly adhered to by all teams, and some department leaders allow their staff to predominantly work remotely to promote productivity, preserve flexibility, and bolster employee morale. According to the results of CIRM's employee engagement survey, 25 of 45 respondents (55.6%) reported disagreeing (11) or strongly disagreeing (14) with the sentiment that the teleworking policy is administered equitably within their workplace. In CIRM's employee engagement survey, nearly all respondents reported that more teleworking would help work-life balance (11 neutral, 3 agree, 29 strongly agree).

Variations in policy adherence and expectations across teams can lead to a sense of unfairness. This dynamic can create resentment between teams and erode employee morale. It can also harm recruitment efforts, if candidates are told different or conflicting expectations, and talent retention, if current employees are enticed by other employers offering more flexible hybrid working terms.

CIRM should evaluate the impact of work from home arrangements on employee productivity and morale. As indicated in the employee engagement survey results, some staff have lengthy and costly commutes. While in-person presence and face-to-face work can benefit working relationships and facilitate ad hoc communication, careful consideration should be taken when determining the degree to which in-office requirements should be enforced. Staff of teams that allow greater flexibility in remote working appreciated the time they recovered from not having to commute, which afforded them the ability to tend to tasks that would otherwise not fit within their workday. In assessing its current hybrid work environment, CIRM should evaluate how its hybrid working policy supports its workforce, an integral part of achieving its operational goals. Ultimately, hybrid working parameters and allowable exceptions should be documented to support consistent application and transparency in how remote working is applied across teams. As CIRM reviews and revises its policy, it should ensure the following elements are addressed:

- **Eligibility:** Clearly define who is eligible to work from home and under what circumstances. This could include criteria such as job duties, performance, degree of commute, availability, and address qualifications for exceptions or alternative arrangements (e.g., job compatibility, extenuating circumstances).

- **Productivity and performance:** Set expectations for productivity and performance, including deadlines, deliverables, and performance metrics. This allows highly productive and high-performing employees to take advantage of remote working days if they continue to match or

exceed the stated expectations for their position and job duties. The process for monitoring and evaluating performance should also be clearly outlined to avoid disagreements and other challenges.

- **Revocation of remote work:** For instances in which granting increased remote workdays have an adverse effect on the quality or completion of work, it can be helpful to document a process to reduce or fully stop WFH arrangements. Communicating the expectation to uphold quality work and commitment to disciplinary action upfront can incentivize productivity and discourage mistreatment of the benefit.

APPENDIX A – PROGRESS TOWARD PERFORMANCE AUDIT RECOMMENDATIONS

According to prior reports, performance audit recommendations for the fiscal year 2010–2011 and fiscal year 2013–2014 Performance Audits have been verified as completely implemented.

Fiscal Year 2019–2020 Performance Audit Recommendations

REOMMENDATION	STATUS	CURRENT AUDIT VALIDATION	BASIS OF VALIDATION
1. Consider improvements to the GMS to strengthen controls related to the review and scoring workflow and ensure that any review and scoring information is captured as part of the application status.	Review and scoring was appropriately reflected in the GMS within our sampled grant application testing.	Completed	Interviews and detailed grants compliance testing
2a. Reinforce the requirements of the Grants Administration Policy SOPs to ensure that all required information is documented and maintained to support grants received and managed by CIRM, including documentation to support changes or deviations from an executed agreement.	Grants Administration Policy requires awardees to retain documents for up to five years beyond the final expenditure report and subjects them to audits by CIRM or other agencies.	Completed	Interviews and document review
2b. Consider adding a requirement for a separate individual to review due dates in the GMS to ensure there were no data entry errors and to prevent late reports due to these errors.	GMS system automatically rolls report due dates based on report submission dates, but does not include a review.	In Progress	Document and SOP review
3. Implement an IT control that allows for missing documentation or reports to be flagged and routed to the responsible CIRM team members.	GMS prenote schedule tool automatically sends email notification to grant managers when EFT payees are missing documents, but not for other scenarios.	In Progress	Document and SOP review

REOMMENDATION	STATUS	CURRENT AUDIT VALIDATION	BASIS OF VALIDATION
4. Conduct succession planning for ICOC leadership and key contributors, document knowledge of long-serving individuals, and continue to take steps to support ICOC leadership transition.	No succession planning documented, but a former employee was able to provide continuity by taking on the Vice Chair role.	Closed[12]	Interviews, document review
5. Engage more ICOC Board Members in decision-making and policy development activities.	Members of the ICOC make decisions on public access to records, funding, and regulation adoption and develop policies for bond financing and intellectual property.	Completed	Interviews, document review
6a. Develop a policy to consistently monitor and enforce compliance with publication disclosure requirements.	Publication disclosures are required as part of awardee reporting requirements. CIRM can withhold funds in the absence of complete reporting.	Completed	Document review, interviews
6b. Consider options, such as implementing a Customer Relationship Management (CRM) system, to support automated proactive monitoring of awardee publication and press releases.	Current effort to explore the potential to build a CRM. CRM listed as a software solution and priority action item underway per CIRM's IT audit	In Progress	Interviews, document review
7. Continue to implement recently adopted practices to actively seek more diverse members of the California scientific community to review and recommend grants, and monitor and evaluate the Grants Working Group (GWG) to promote a diversity of perspectives, backgrounds, and expertise.	Organization-wide DEI initiative and engagement with subject matter expert dedicated to assess and encourage diversity among the GWG.	In Progress	Interviews, performance metrics and strategic plan
8. Update the CIRM Records Retention Schedule, establish policies and procedures for records management, and consider developing annual	Policies and procedures require awardees to retain documents, and bond staff are to retain records for outstanding bonds. No general record retention directive prescribed to CIRM.	In Progress	Document review, interviews

[12] Closed indicates that CIRM did not complete the recommendations as written, but the recommendation is no longer relevant to agency operations.

REOMMENDATION	STATUS	CURRENT AUDIT VALIDATION	BASIS OF VALIDATION
trainings to support a consistent understanding of records requirements.			
9. Develop an adoption strategy that includes ample communication, policy and procedure guidance, and accountability practices to support consistent expectations and system utilization.	Adoption is included in annual and quarterly goals for project management, but no formal strategy in place. With the exception of Monday.com, other software adoption remains a challenge.	In Progress	Interviews, document review
10. Continue to identify and pursue opportunities to enhance GMS capabilities to automate processes, centralize data, and enhance access.	Grants management team was restructured, an assessment of the GMS was completed in FY 23, and the team has an implementation plan for ongoing improvements.	Completed	Interviews, document review, IT performance audit and strategic plan
11. Consider implementing an integrated database and Customer Relationship Management (CRM) system to collect and better analyze scientific and business data in support of CIRM's mission.	Current effort to explore the potential to build a CRM. CRM listed as a software solution and priority action item underway per CIRM's IT audit.	In Progress	Interviews, document review

Fiscal Year 2016–2017 Performance Audit Recommendations

REOMMENDATION	2019–2020 VALIDATION	STATUS	CURRENT AUDIT VALIDATION	BASIS OF VALIDATION
1. Increase controls to ensure that any scoring changes are accurately reflected in the GMS database.	Complete	N/A	N/A	N/A
2. Implement procedures to ensure adherence to the grants management SOPs and completion of the grant closeout checklist.	In progress	SOPs and Closeout Checklist developed.	Completed	Document review
3. Create a formal development plan that identifies roles and responsibilities and the timing of fundraising activities to meet CIRM's programmatic and administrative funding needs.	Complete	N/A	N/A	N/A

REOMMENDATION	2019–2020 VALIDATION	STATUS	CURRENT AUDIT VALIDATION	BASIS OF VALIDATION
4. Develop communications and public education metrics that are integrated into CIRM's quarterly reporting.	Complete	N/A	N/A	N/A
5. Continue to revise job descriptions to ensure alignment with current duties, roles, and authorities.	Complete	N/A	N/A	N/A
6. Building on efforts to date, continue to regularly communicate transition plans to staff and consider strategies to retain employees, including implementing staff development programs, recognition and reward opportunities, work-life balance initiatives, and cross-functional initiatives.	Complete	N/A	N/A	N/A
7. Develop succession plans for the Chair and Vice Chair, document knowledge of individuals serving in leadership roles, and continue to identify potential highly qualified prospective ICOC members.	In progress	No succession plan documented.	Closed	Interviews, document review
8. Proactively engage more Board members in decision-making and policy development activities.	Complete	N/A	N/A	N/A
9. Continue to identify and pursue opportunities to enhance GMS capabilities to automate processes, reduce paperwork, and enhance information access.	In progress	GMS enhancements are planned and underway following an external evaluation.	Completed	Interviews and walkthrough
10. Regularly evaluate IT systems to eliminate duplication, ensure systems are adequately meeting CIRM's needs, and consider the impacts of a potential organizational wind-down when making systems decisions.	In progress	IT performance audit was conducted, and the strategic IT roadmap has many system assessments planned.	Completed	Interviews and document review

APPENDIX B – WORKLOAD ANALYSIS WORKSHEET SAMPLE[13]

The American Speech-Language-Hearing Association's *Implementation Guide: A Workload Analysis Approach for Establishing Caseload Standards in Schools* provides a variety of templates and tools to perform workload analysis for case-based staff. While the specific functional details do not apply to CIRM, the templates could be easily adapted for its use. A sample Workload Analysis Survey template is included here for reference. Each task is listed in the column farthest left, and the amount of time spent on that task per week is added to each weekday column. Individuals may use a tally, "X", or checkmark to indicate a defined increment of time. For example, one checkmark could equal 25 minutes.

WORKLOAD ANALYSIS WORKSHEET TEMPLATE						
Task	Mon	Tue	Wed	Thu	Fri	Total
Therapy						
Consultation						
Evaluation & Screening						
Observation						
Phone Calls & Email						
Report Writing						
Pre-referral Team Meetings						
Evaluation Team Meetings						
IEP Meetings						
Compliance Paperwork						
District Paperwork						
Planning & Material Prep						
Preparation of AAC & Visuals						
Scheduling/Rescheduling						
Professional Dev/Colleague Support						
Travel Time						

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[13] Source: https://www.prosci.com/change-management/thought-leadership-library/change-management-process

Supplementary Workload Analysis Survey

Is this a typical week for this time of the fiscal year? (Circle one.)

- Less busy than normal
- Typical
- Busier than normal

1. List any factors that you feel have influenced your workload this week (for example, emergencies, scheduling issues):

```



```

2. Specifically, what do you need from the leadership to be able to:
   - Provide appropriate services to meet internal and external needs.
   - Implement best practices for the tasks you are responsible for.
   - Ensure compliance with any compliance or regulatory mandates.

```



```

Other comments:

```



```

APPENDIX C – SAMPLE CHANGE MANAGEMENT TEMPLATES[14]

PROSCI 3-Phase Process for Organizational Change

Phase 1: Preparing for change

- Conduct readiness assessments
- Develop risk analysis
- Identify special tactics
- Identify anticipated resistance
- Document strategy
- Architect team structure and prepare the team
- Develop sponsorship model and prepare sponsors

Phase 1 – Preparing for Change

> Define your change management strategy
>
> Prepare your change management team
>
> Develop your sponsorship model

Phase 2: Managing change

- Customize activities based on strategy analysis
- Create communications plan
- Create sponsor roadmap
- Create coaching plan
- Create training plan
- Create resistance management plan
- Integrate plans into the overall project plan
- Execute change management plans

Phase 2 – Managing Change

> Develop change management plans
>
> Take action and implement plans

Phase 3: Reinforcing change

- Collect proactive feedback
- Listen to employees
- Audit compliance
- Identify gaps
- Identify resistance and pockets of resistance
- Celebrate successes
- Transition to business as usual

Phase 3 – Reinforcing Change

> Collect and analyze feedback
>
> Diagnose gaps and manage resistance
>
> Implement corrective actions and celebrate successes

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[14] Source: https://www.gla.ac.uk/media/media_359005_en.pdf

University of Glasgow Change Management Plan Template 3

Introduction

Provide background, link to strategic goals and other changes

Project Sponsor

This person leads the change project and is accountable for ensuring the project and change plan are implemented

Project Objectives

Detail what the project will achieve.

Change Objectives and Principles

Provide details of:
- What the change process will achieve [e.g. information sharing, engagement, input into system changes];
- Principles that underpin the change plan [e.g. inclusiveness/consultation, timeliness]; and
- Ethical issues that need to be considered and how will the change plan will address them.

Change Plan Elements

What are the main elements in the change plan? [e.g. people/culture, systems/technology, documentation, positions/roles, process, skills] Each of these elements may require a particular focus in the change plan.

Rationale for the Change

List the drivers and constraints for change.
What are the risks for the change process?

Key Stakeholder Analysis

Identify the key stakeholders [consider staff, other colleagues in the University, management, unions, students and other clients] and:

- Analyse their response to the change [e.g. what will be their main concerns/fear, where is there likely to be support for the change];
- Identify their needs in terms of change management and consider the style of communication required [language style & level]; and
- Identify the preferred media for communicating or consulting with them about the change [e.g. sessions involving dialogue about the changes, newsletters, briefings from project team members, frequently asked questions].

APPENDIX D – SAMPLE ORIENTATION PACKAGE

Sample Orientation Checklist

(To be completed within three days of the employee's start date)

Employee Name:	
Hire Date:	
Department:	
Manager Name:	

Introduction to the Organization

☐ Organization Overview

☐ Department culture

☐ Department mission

☐ Department literature/video

☐ Organizational chart

New-Employee Paperwork

☐ W-4 and state tax forms

☐ I-9 form

☐ Employee handbook

Benefits and Compensation

☐ Health, life, disability insurance

☐ Retirement benefits

☐ Dependent care FSA

☐ Educational assistance

☐ Employee assistance program

☐ Pay procedures

☐ Salary increase/performance review process

☐ Incentive/bonus programs

☐ Paid and unpaid leave

Administrative Procedures

☐ Office/desk/workstation

☐ Computer username and password

☐ Email

☐ Keys/access card

- ☐ ID badge
- ☐ Mail (incoming and outgoing)
- ☐ Business cards
- ☐ Purchase requests
- ☐ Telephones
- ☐ Conference rooms
- ☐ Expense reports

Key Policy Review

- ☐ Anti-harassment/discrimination
- ☐ Vacation and sick leave
- ☐ FMLA/leaves of absence
- ☐ Overtime
- ☐ Dress code
- ☐ Personal conduct standards
- ☐ Progressive discipline
- ☐ Security
- ☐ Confidentiality
- ☐ Safety
- ☐ Injury reporting
- ☐ Emergency procedures
- ☐ Email and Internet usage

Introductions and Tours

- ☐ Department staff and key personnel
- ☐ Tour of facility, including:
  - ○ Restrooms
  - ○ Mailroom
  - ○ Copy centers, printers, fax machines
  - ○ Bulletin board
  - ○ Parking
  - ○ Office supplies
  - ○ Break rooms
  - ○ Coffee/vending machines
  - ○ Watercoolers
  - ○ Emergency exits

Introduction to the Organization

- ☐ Organization Overview
- ☐ Department culture
- ☐ Department mission
- ☐ Department literature/video
- ☐ Organizational chart

New-Employee Paperwork

- ☐ W-4 and state tax forms
- ☐ I-9 form
- ☐ Employee handbook

Benefits and Compensation

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  - ○ Coffee/vending machines
  - ○ Watercoolers
  - ○ Emergency exits

Acknowledgement

(To be signed upon completion of all orientation items)

Employee:		Date:	
Manager:		Date:	

Return original to Human Resources – Copies to manager and employee.

Sample 30/60/90day Onboarding Plan

PHASE	TASKS
30 Days Learning	**Introduce buddy** • Introduce the new hire to their buddy. • Consider arranging weekly check-ins with the buddy or manager for the first 30 days to review job responsibilities, dedicate time to training, review progress, and provide the opportunity for feedback or questions from the new employee. **Review team basics** • Start the first few days with team introductions and ease the new hire into their primary job roles. Throughout the first week, walk them through all of their new responsibilities so they know what is expected of them on a day-to-day basis. • Review documents such as guides, desk manuals, or training videos. • Maintain an onboarding handbook that is reviewed initially between a new employee and the team manager, supervisor, or buddy to highlight important elements. The handbook should then be accessible to the employee for frequent self-serve reference, freeing up managers' time while new hires absorb the information. **Share team processes** • Walk new hires through their team's day-to-day operations. • Review how the team manages projects and collaborates on different tasks, and the systems and resources to use to gain mastery of each task. • Emphasize communication guidelines. Teams will likely already have informal standards on how and when to communicate. Start introducing this early by using asynchronous communication methods to check in on the new hire's progress and share feedback at appropriate intervals. • This can be a great way to involve other team members. Assign tasks to different veteran team members to review/train on different operations. This promotes team unity and bonding for the new employee. **Provide relevant internal materials and logins** • Share key information like logins on day one, so new employees can get their bearings with the tools the team uses. • Create a "cheat sheet" with specific logins or share access to a secure password management system or tool. • Orient the new employee to where resources for their work are located such as a shared drive, intranet, or other location. **Establish goals and start training** • The final step of the first 30 days, after a new hire has spent time getting acclimated and meeting everyone they will work closely with, is to start training for their day-to-day tasks. • Establish learning goals for each week in the first 30 days so the new hire understands what is expected of them and how long they have to master each of their new tasks. • Identify opportunities for job shadowing, re-emphasize communication standards, and where tools and resources are located for supplemental support.

PHASE	TASKS
60 Days Training	**Deepen work proficiencies** ● Now that a new hire is used to the team's workflows, systems, and tasks, it is time to increase the overall workload and reduce the level of direct support. ● Start introducing or transitioning more responsibilities, especially as the new employee becomes more comfortable with the tasks they learned in the first 30 days. ● Emphasize small, quick wins for new hires to gain momentum as they continue forward. This is the point where new hires can get more involved in projects and start to speak up more with their ideas and thoughts. ● Increase autonomy ● Reduce frequency of buddy or manager check-ins to bi-weekly, or monthly. ● Review progress towards goals established in the first 30 days. Address gap areas, and identify people, tools, or other materials to support continued learning.
90 Days Accountability	**Review progress and address any gaps** ● Complete any outstanding new employee training ● Provide necessary training to fill remaining knowledge/skill gaps and/or help the worker acquire necessary competencies ● Continue to monitor employee's performance, provide regular and timely feedback, and answer questions ● Complete 90-day review

APPENDIX E – MANAGEMENT RESPONSE

CIRM would like to thank Moss Adams for their work on the Performance Audit. Moss Adams took time to learn about the improvement and operational excellence regarding CIRM's ongoing operations and to highlight those areas for improvement in the Performance Audit. CIRM will consider the proposed recommendations, along with other options, all geared to improve the efficiency of the agency's operations. We will report back to the Board at a later time with our plan for addressing Moss Adams' recommendations and will continue to update the Board as we progress.