

STRATEGY FOR BUILDING A STRONG COMMUNICATION PROGRAM

Prepared for the California Institute for Regenerative Medicine
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CHARGE

We were asked to review and evaluate the California Institute for Regenerative Medicine's (CIRM's/Institute's) communications efforts and to make recommendations for future improvements based on that evaluation, in keeping with the recent decision by the Institute's Board to place responsibility for agency communications within the Office of the Chair. Our research has included extensive review of news stories, blog postings, outreach materials and other communications instruments that directly affect the agency's interaction with the public and interest groups. We have conducted in-depth interviews with the Chair's Office and met with the President, other executive leadership, key staff, consultants and stakeholders most familiar with the current communication effort. And we have reviewed the best-practice examples of other public agencies we are familiar with, including some that we helped develop in the past.

Following is the strategic communication approach we would recommend that the Institute chart for its future. Considering the agency's available resources, visibility, political expectations and research-funding responsibilities, we believe this approach would most effectively ensure that the agency continues to carry out its science-based communications program as well as transparently present the public with the information it needs and requires to fully understand and appreciate how the Institute is meeting its responsibilities under Proposition 71.

GOAL

The goal of this plan is to create a framework for using communications tools to assist the Institute in becoming recognized and supported as the world's leading stem cell research funding institution and one of California's most valuable assets for life-saving cures and economic growth.

OVERVIEW

As a governmental agency, the California Institute for Regenerative Medicine lives in two worlds – the high-level domain of advanced scientific research and the secular world of politics and public opinion. Created by voters through Proposition 71 in 2004, the Institute has a responsibility to communicate across a spectrum of audiences.

Virtually since its inception and until recently, the Institute has been led by a high-profile, articulate and charismatic individual who assumed much of the responsibility for communicating with many if not most of CIRM's audiences. Although that situation helped keep messages simple and focused, it did not keep pace with the demands of the Institute to communicate at many different levels and with many different audiences.

The Institute's three-person communication staff, which has worked under the direction of the Office of the President, has concentrated its efforts on promoting the agency's support for research and development of life-saving cures, as envisioned in its 2006 Scientific Strategic Plan (Appendix A). That approach has delivered measureable success in placing feature stories in both mainstream media and the science media, including cover stories in *Nature* and *Science*, in the *New York Times* and the *Wall Street Journal*, and in California's major daily newspapers. But it sometimes has led to less than satisfactory results in addressing other communication challenges.

The Institute's 2006 Scientific Strategic Plan includes CIRM's only communication plan formally adopted by the Independent Citizens' Oversight Committee (the Board). A communication plan update was included in the 2009 Scientific Strategic Plan update, Pages 7-10 (Appendix B) but was not adopted by the Board in 2009. The 2006 plan professes to recognize CIRM's responsibility to communicate with a broad range of audiences:

- "The fruits of research that is funded with public monies should be accessible to the public that made the work possible."
- "CIRM's responsibility to the public includes promoting the public's awareness and understanding of the fundamental science and issues surrounding stem cell research."

The three pages in the 2006 Strategic Plan devoted to outreach to the scientific community and broader public concludes that the way to do that is to:

- Post peer-reviewed journal articles on CIRM's website
- Create "a central resource of organized and managed data for scientists"
- "Support forums in which scientists can present their work in a format that is easily accessible to the public"
- Develop educational materials and outreach programs that "provide expert seminars, presentations, and/or immersion opportunities to diverse communities throughout California"

Nowhere does the 2006 plan mention conventional outreach to the news media or modern social media, nor does it acknowledge the need for interface with mass audiences, such as the members of the California public who supported Proposition 71 in the first place. No mention is made of meeting the hour-by-hour, even minute-by-minute demands of today's fractured communication channels. In fact, development and

execution of each of the communication elements in the Strategic Plan necessarily has long lead times. Under the Institute's current communication procedures, that lack of specific planning to address immediate-response needs has hurt CIRM's image with the public and policy-makers at times.

Perhaps as a result, the Institute has found itself largely reactive and limited in the success of its communications efforts when dealing with more secular issues related to governance, public policy development and finance. Most recently, CIRM management has assigned responsibility for meeting immediate communication needs to the Executive Director of the Institute's Independent Citizens' Oversight Committee, who frequently directs response to mainstream news media and bloggers, to the public and to government officials.

This lack of coordination and systematic organization has led at times to dysfunction, and, while the Institute may be respected and well-known in the scientific world, it is far less of either among other critical audiences:

- It has left various staff without guidance on how to most effectively deal with communication challenges as they arise.
- It has resulted in the Institute failing to most effectively use the incredible assets – personnel, intellectual and financial – at its disposal.
- And it has prevented the Institute from most effectively making all of its audiences aware of the pioneering work it has been doing since its inception.

The 2009 update (Appendix B), which was not adopted by the Board, reflected significant improvements in on-line and interactive communication efforts. And while it did note that a public relations agency had been retained to help with targeted media placement, the updated plan still supported the board and administration silos that have undermined communication in the past and it still did not address timely response to mainstream news media and bloggers, to the public and to government officials.

We believe the Institute should require development of a formal communication plan, updated annually, to integrate all of the Stem Cell Institute's internal, public education and media communication efforts. Creation of a long-term communication strategy will position the Institute to be more effective and proactive rather than reactive when the need arises.

COMMUNICATIONS ENVIRONMENT

The Institute works in a unique environment.

- It was created by the action of California voters at the end of a successful political campaign. It receives taxpayer support. Its administration includes political appointees and is subject to legislative and executive branch oversight.
- The bulk of its work is geared to the somewhat insular world of stem-cell research – a critical but very narrow slice of advanced medical research.
- It subsidizes that research through a \$3 billion bond fund created by voters. The fiduciary responsibility for management of those public funds demands tight oversight and great transparency.

In communication, perception is reality. Whether accurate or not, the Institute faces mixed perceptions that must be taken into account as CIRM moves forward with a long-term communication strategy. And it must do so without interrupting or weakening the credibility it has established in the clinical/science arena.

AUDIENCES

As a \$3 billion-dollar government agency, created by voters, charged with funding sensitive and pioneering stem cell research, the Institute is subject to a number of challenges in communicating with its audiences. For CIRM to succeed, it must win the attention and support of its audiences and influence their decision-making.

The Institute's key audiences include:

- **The governor, the Legislature, the federal government and other government oversight groups** – This audience can and has either criticized or supported the actions of the Institute, often without full understanding and knowledge of CIRM's work. This same audience can influence public opinion, purse strings and board membership, making it a critical group for constant, well-strategized information from the Institute.
- **The general public** – This group has a broad stake in how their tax dollars are being used and want to know that the promise of Proposition 71 is being kept. While they traditionally have gotten their information from mainstream news media, that is no longer true. Much of the flow of information to the public is through interactive and electronic media today, particularly blogs and websites.

- **News media** – While medical specialty and trade media have found good cooperation from the Institute, resulting in some showcase industry coverage, mainstream media and bloggers have not similarly been served or courted consistently. The result is that in the general media and in the blogosphere, critics have been free to fill the vacuum.
- **Educational Community** – Through the efforts of the Board's Vice Chairman and the Institute's science staff, CIRM has built a solid relationship with educators, advocating successfully for integration of stem cell biology into the state's science curriculum standards. CIRM has also developed curricula and teaching materials that enable teachers to present accurate and current stem cell science to students at various grade levels. Continued attention to this audience will pay long-term dividends to the interest of stem cell research.
- **The scientific community** – This important audience is critical to demonstrating and validating the efficacy and worth of the public's investment in stem-cell research. It also provides a deep resource pool for spokespeople who can tell the Institute's story. While CIRM has a strong connection to this audience, it can do a much better job of employing them as a communication asset.
- **Patient advocates** – The greatest beneficiaries of the stem cell research enterprise are the people who are dependent on the cures funded by CIRM. They are at once a principal audience and a key source of support for the Institute. The outreach program that began in 2010 has made progress in engaging this community, but more needs to be done.
- **Doctors and other health-care providers** – These are the "end users" of the cures being developed through stem cell research. Many are participating in that research and in the development of stem cell-related therapies, while others are vitally interested in the outcomes of the Institute's investments in research and development. Together with the patient advocates, they have the potential to be the most effective at telling the Institute's story.

STRATEGIC APPROACHES

Given the communication environment discussed above, we recommend a number of strategic approaches that can help meet the Institute's communication objectives. As background, the Institute is not entirely alone in its communication challenges. We have helped develop communications strategies for others with seemingly unrelated functions or diverse business lines, including the California Public Employees Retirement System (CalPERS). Even though CalPERS has separate staffs and mid-management structures

to support such functions as investment, health benefits, retirement benefits, insurance and home loans, it has successfully created a communication umbrella structure that well serves each of those functions.

Similarly, we believe the following strategic approaches can help remove the operational silos that currently exist in the Office of the Chair and the Office of the President and will successfully facilitate integration of all of the communications activities – among the science community, public advocates, elected officials and other stakeholders. The approach will create a framework for taking maximum advantage of all resources, assets and communications tools to assist the Institute in becoming recognized and supported as the world's leading stem cell research funding institution and one of California's most valuable assets for life-saving cures and economic growth.

- 1. Centralize the management of communications activities** – Communication with the scientific research community is currently provided through the President's office. The Board has directed that public communication be handled through the Chairman's office. While it is entirely appropriate to provide separate communication support to both the science and the management staffs, the Institute will continue to struggle in telling its story so long as there is not a single manager responsible for all communication functions. Failure to merge communication responsibility will lead to lack of coordination, conflict and missed opportunity. For that reason, the Chairman has established the position of Senior Director of Public Communications and Patient Advocate Outreach to oversee all the Institute's communications.

The Board has indicated its desire to minimize communication conflict and failure. It will be critical that this structure not disrupt the science communications effort that has proven effective in raising awareness and respect among scientific research audiences. The structure must also support the continued close involvement of the President's office to ensure scientific oversight, accuracy and appropriateness of communications and education.

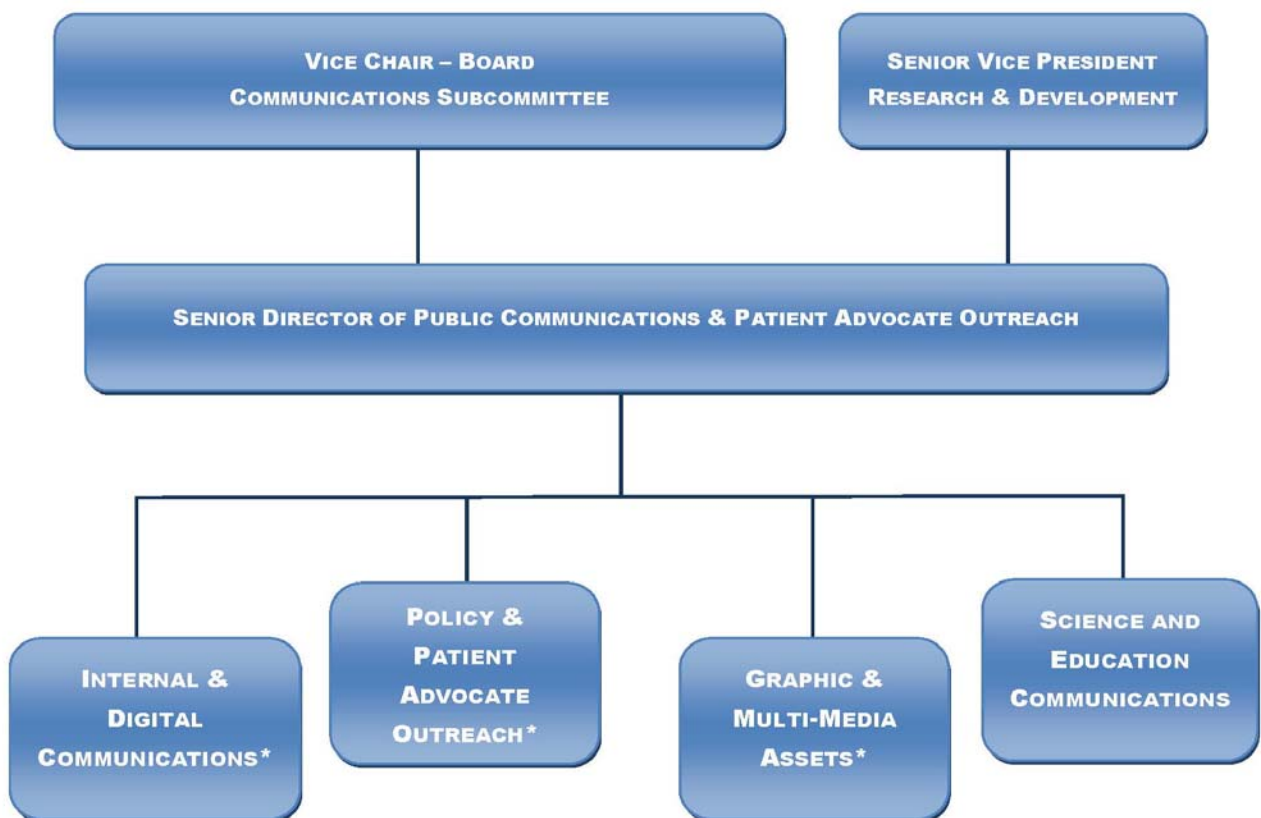
In essence, the new structure is designed to:

1. Add communication capability focused on public communication, mainstream media relations, patient advocate outreach and general stakeholder engagement.
2. Support an integrated, comprehensive approach to communications that supports both the domain of advanced scientific research (Office of the President) and the secular world of public education and public opinion (Office of the Chair).

The Senior Director of Public Communications and Patient Advocate Outreach should report directly to the Vice Chair of the Governing Board and the Senior Vice President, Research and Development to bridge the gap between Board and management silos and to assure timely response to communication demands.

In this way, the Senior Director of Public Communications and Patient Advocate Outreach can build a collegial and collaborative staff – perhaps as a performance goal – who will break down the current divide between the management and scientific staffs of the Institute.

- 2. Retain a professional support staff to fulfill communication needs** – The diversity of needs and requirements at the Institute, the rising demand from the public for information and the increased attention of policy-makers all suggest that CIRM currently is understaffed in its communication operation. We believe the following chart illustrates the best approach for organizing the Institute's communication infrastructure:



* The ultimate determination of staff level, job title and compensation will be determined by the Institute based on staff needs and budget. Similarly, it will be up to the Institute to determine whether these roles are best fulfilled by retaining staff or contracting out.

This structure would include the positions described below. Importantly, while we took an objective assessment of the structure requirements, we believe the scope of work the current staff is providing the agency supports the recommended approach.

With the exception of the Senior Director of Public Communications and Patient Advocate Outreach, job titles and staff positions referenced below are for descriptive purposes only. The ultimate determination of staff level, job title and compensation will be determined by the Institute based on staff needs and budget. Similarly, it will be up to the Institute to determine whether these roles are best fulfilled by retaining staff or contracting out.

- **A Senior Director of Public Communications and Patient Advocate Outreach** – To provide staff direction and strategic advice: to interface with elected officials, news media, patient advocates and other stakeholders, and to serve as a single point of responsibility for the success of the Institute's communication efforts.
- **A Director for Science and Education Communications** – To coordinate and carry out all communication in support of the Institute's focus on funding advanced scientific research and to support the Institute's high school education outreach effort and long-form science-oriented documents, such as the revision of the Scientific Strategic Plan. This person would also assist the Senior Director of Public Communications and Patient Advocate Outreach in managing the day-to-day activities of the communications team.
- **A Director for Media and Patient Advocate Outreach** – To provide communication support to the Independent Citizens' Oversight Committee, to interface with the general news media and to support the Institute's patient advocacy efforts.
- **A Manager of Internal and Digital Communications** – As a \$3 billion public agency, CIRM has critical communication needs within its own organization and among its research grantees. This, as much as any other position, will help coordinate messaging and assure that the Institute's story is consistent across domains. In addition, most people today get their information in some form through electronic and interactive media, such as www.cirm.ca.gov, Facebook, Twitter, LinkedIn, blogs and YouTube. Because monitoring and responding to this information flow is so immediate and demanding as well as so critical to the Institute, this position should be a recognized staff commitment in support of both the Director for Science and Education Communications and the Director for Media and Patient Advocate Outreach.

- **A Manager of Graphic and Multi-Media Assets** – This position is important to help build the Institute's brand identity, to apply it consistently and to fulfill all the internal and external graphic communications needs.
3. **Re-brand CIRM as the Stem Cell Institute** – Central to the success of the Institute's efforts is a clear public understanding of the work it does, the type of cures research it is funding and its role in the California economy. The original title – California Institute for Regenerative Medicine – has proven not particularly effective in helping the public have that understanding. We believe rebranding the agency as the Stem Cell Institute will better serve those goals.
 4. **Require annual submission of a Communication Plan** – To ensure that the Institute is aggressively telling its story and not just reactive to inquiries from others, the Senior Director of Public Communications and Patient Advocate Outreach should submit an annual Communication Plan to the Board outlining its proactive goals over the coming year. That plan should be a "living document" that can be adapted as needs and circumstances change during the course of the year, but it should provide the impetus for regular, focused and on-going external communication.
 5. **Establish a solid message platform to provide a foundation for all Institute communications** – Developing a solid set of communication messages that reflect the Institute's core values and ideals will help provide the public with a better, broader understanding of the Institute's role in California and in the search for advanced cures. We have provided a "first draft" of such a message platform:

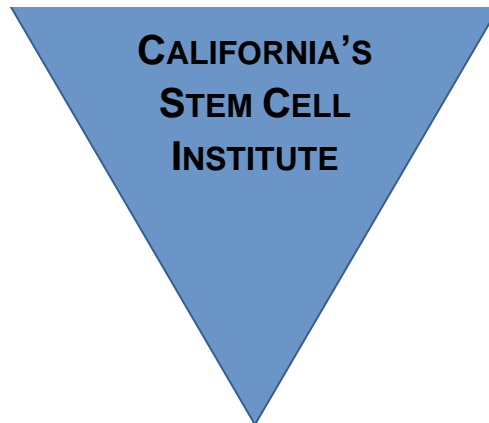
MESSAGE TRIANGLE

HOME OF BIOTECH'S NEW FRONTIER

- California internationally recognized as the center of the world's leading stem cell research.
- Accelerating next evolution of medical treatments.
 - 12 research institutes attracting hundreds of scientists
 - Discovering the causes of complex human diseases
 - Application of stem cell-based therapies for a wide variety of degenerative diseases
 - 450 grants, 44 research projects for 26 diseases
- Strategies to redirect the body's own capacity to regenerate injured and diseased tissue.

KEEPING PROMISES AND VOTERS' TRUST

- Already have invested more than \$1 billion in pioneering research to find cures for serious illnesses and injuries including leading contenders for clinical trials in:
 - Type 1 Diabetes
 - Cancer
 - Macular degenerations (central vision blindness)
 - Cardiovascular disease and strokes
 - Spinal cord injury
- Within five years we've transformed stem cell research, attracted dozens of leading scientists to California and provided critical infrastructure and training for scientists.
 - Consistent funding at all stages accelerates discovery, development and application of stem cell-based therapies
 - The Institute is co-founding the first human embryonic stem cell clinical trial
- Institute is committed to transparency, strong fiscal oversight and public accountability.
 - Institute staying within budget and statutory 6% operating cap



LEVERAGING CALIFORNIA'S INVESTMENT

- Critical to California's economic future:
 - Grants to California institutions and companies, leveraging other public and private funds.
 - First \$1 billion of research funding and \$1 billion in matching funds will generate through 2014:
 - 25,000 job years
 - \$160 million in new state tax revenue
 - nearly \$45 million in local tax revenue
 - An industry with significant economic growth potential in short and long-term.
 - Research investments strengthen existing biotech clusters in the Bay Area, San Diego and the Central Valley.
- Financial and intellectual investments leveraged through large international network of collaborations are advancing life-saving research that wouldn't otherwise occur.
- High school curriculum and University summer program courses fill the void in the state's education system to cultivate students' interest in stem cell research.
- Bridges to Stem Cell program enables scientists to participate in stem cell research from a wide diversity of backgrounds.

COMMUNICATION TACTICS

While the Senior Director of Public Communications and Patient Advocate Outreach will be responsible for developing a comprehensive communications strategic plan, we offer the following tactics to support the strategic approaches outlined above. We believe these tactics will help further the Institute's goal of becoming recognized and supported as the world's leading stem cell research funding institution and one of California's most valuable assets for life-saving cures and economic growth.

- Brand all material as Stem Cell Institute
- Conduct polling, focus groups and interviews with key stakeholders/audiences to determine if they are knowledgeable about and satisfied with the agency's communication efforts and use those findings to guide future communication strategies.
- Develop new communication tools
 - Metrics for success of communication program – i.e., the number of stories placed featuring research outcomes by biotech and pharmaceutical companies, public support as measured through polling, etc.
 - Series of one-page information sheets or policy statements to support better understanding of Institute policies
 - Mission
 - Funding process
 - Peer review process
 - Transparency
 - Protocols to assure consistent, accurate and timely response, the Institute should develop a set of guidelines for response when the news media and elected officials call seeking an official response.
 - Those protocols should at a minimum require that those inquiries be channeled through the Senior Director of Public Communications and Patient Advocate Outreach to assure that someone who has the knowledge, the background and the most accurate information responds in a timely way. The guidelines should also establish clear policies for producing and distributing the annual report and all other communication materials.

- A list of patient advocate groups, doctors and other spokespeople who support the Institute's objectives – These are the people who can best tell the Institute's pioneering research-for-cures story in a compelling way to the broader public.
- A list of key communicators – reporters, editors, bloggers and others who regularly address the Institute's work are the pipeline to the broader public. To succeed, the agency must be able to communicate with the communicators.
- A new focus on social and electronic media platforms – The Institute should take time to develop strategies for excellence in communication in today's world.

Appendix A



CALIFORNIA INSTITUTE FOR

CIIRM

REGENERATIVE MEDICINE



*Turning Stem
Cells into Cures*

—Roman Reed

Scientific Strategic Plan

December 2006

Proposed CIRM Activities

1. RFA under the hESC Jump Start Initiative for Shared Research Laboratory Space.
2. RFA for major facilities, tiered to accommodate both large and small institutions.

Estimated Funding Allocations

1. CIRM intends to provide up to \$17.5 million in facilities as part of its shared research laboratory grants program.
2. CIRM plans to award several large facilities grants, with funds to be distributed between 2007 and 2009, for approximately \$150 million.
3. CIRM plans to award several smaller facilities grants, with funds to be distributed between 2007 and 2009, for approximately \$71.9 million.
4. CIRM intends to provide up to \$35 million in facilities support as part of its Cores Initiative. Any facilities support for the Bank Initiative would be included in the Core Initiative facilities support.

Total estimated cost - up to \$274.4 million

Communities of Science

Initiative: Journal / Web Portal

Significance and Justification

Communication of research findings is an essential means of accelerating our progress towards stem cell-derived therapies and diagnostics. New data and knowledge produced through sponsored research must be available to the scientific community to encourage further refinement of established ideas and stimulate development of new concepts. Immediate access to published, peer-reviewed materials is one mechanism for enhancing scientific communication, not only among researchers but also with the public. The fruits of research that is funded with public monies should be accessible to the public that made the work possible. Toward these ends, CIRM intends to support a collaborative effort to establish a peer-reviewed journal for stem cell research, similar to those published by the Public Library of Science (PLOS) or BioMed Central, which will provide scientists with an immediate-access option that is of high quality. In order to reach wide readership, the journal must be web-accessible, freely available, and may also include a print version.

An important feature of many of these journals is interpretative material that explains in lay terms the scientific significance of a particular paper and the implications of the research. Articles of this sort that are oriented toward patients are particularly useful for clinical studies. CIRM would offer support for these journals by directly supporting the production of this material and by paying authors' fees for CIRM scientists who submit work to them. Because web-based, open access journals make material immediately available without charge, CIRM would be both accelerating scientific progress and fulfilling its mandate to inform the public by supporting such a journal.

Open access to published, peer-reviewed materials is one obvious mechanism for enhancing scientific communication. Relevant research data and knowledge from around the world will nevertheless continue to be placed in journals that range from the most obscure to the most widely read. In some cases, key information may not be published at all, particularly if such data are not directly tied to an original body of work. Thus, an important additional mechanism to aid communication is the creation of a central resource of organized and managed data for scientists.

Interest in a web-accessible database or knowledge base of available human stem cell lines, for example, has already been expressed by many stem cell researchers. Such a database, to be useful, must be supported by a centralized effort to characterize stem cell lines in a reliable and reproducible manner that permits at least a qualitative comparison of all studied lines. Knowledge of gene expression profiles, specific complement of cell-surface markers, and differentiation capability under specific culture conditions, for example, is helpful to scientists developing research studies with specific stem cell lines.

Similarly, a database/knowledge base of available research tools such as antibodies, cell-surface markers, and culture media components may prove useful. Such communications tools should not only serve California scientists but also bring knowledge from around the world to accelerate our progress towards therapies and cures.

Proposed CIRM Activities

1. Develop, with suitable partners, a web-based, open-access scientific journal.
2. Database / knowledge base of available stem cell lines (see "Banks" initiative)
3. Support the development of a freely available, web-accessible database/knowledge base of stem cell research tools (e.g., antibodies, siRNA, culture components) to increase knowledge of and access to valuable reagents and methods.

Estimated Funding Allocations

1. CIRM has allocated funds from 2008 to 2017 for the development and maintenance of an online journal, for a total of \$2.75 million.
2. Database / knowledge base of available stem cell lines (see "Banks" initiative)
3. CIRM has allocated funds from 2008 to 2017 for the development and maintenance of a web portal to provide access to stem cell research tools, for a total of \$2.85 million.

Total estimated cost - \$5.6 million

Responsibility to the Public

Initiative: Public Outreach

Significance and Justification

To an unusual degree, stem cell research is in the public eye. Its progress is keenly followed not only by scientists and clinicians, but by ethicists, legislators, politicians, social scientists, and those interested in public policy. Most importantly, patients and their families feel a deep involvement in stem cell research. The engagement, support and interest of this broad constituency are a great strength for CIRM. It also confers a responsibility for the Institute to communicate and interpret the results of stem cell research in many venues and to be aware of its broad impact on society; effective communication that fosters awareness is an imperative for CIRM.

CIRM's responsibility to the public includes promoting the public's awareness and understanding of the fundamental science and issues surrounding stem cell research. In addition, CIRM needs to keep the public informed of the many challenges faced by scientists and clinicians in therapy development and the impact and potential of research findings. One of the best ways to achieve these goals is to recruit the stem cell scientific community in efforts to share information with the public directly. To do so effectively, scientists must develop the necessary communication skills that permit and enhance their ability to deliver new findings and complex concepts in lay terms. As part of its training and career development programs, CIRM will support forums in which scientists can present their work in a format that is easily accessible to the public.

CIRM will also provide support to develop educational materials (e.g., videos, textbooks) and public outreach programs that provide expert seminars, presentations, and/or immersion opportunities to diverse communities throughout California.

Proposed CIRM Activities

1. Support work to develop educational materials on stem cell research such as textbooks, videos, and web tools.
2. Forums where scientists can present their work in formats accessible to the public and/or coursework for stem cell scientists to enhance skills in communicating with the public.
3. Support open access web-based and/or print reviews of stem cell research aimed for consumption by the lay public.

Estimated Funding Allocations

1. CIRM plans to award grants for the development of stem cell-related educational materials, for a total of \$1.5 million.
2. CIRM plans to award up to a total of \$500,000 over the period 2008 through 2017 to support forums where scientists can present their work to the public and for institutions to assist stem cell scientists in communicating with the public.
3. CIRM will allocate funding from 2008 to 2017 to support the creation and maintenance of web-based information resources for the general public, for a total of \$2.5 million

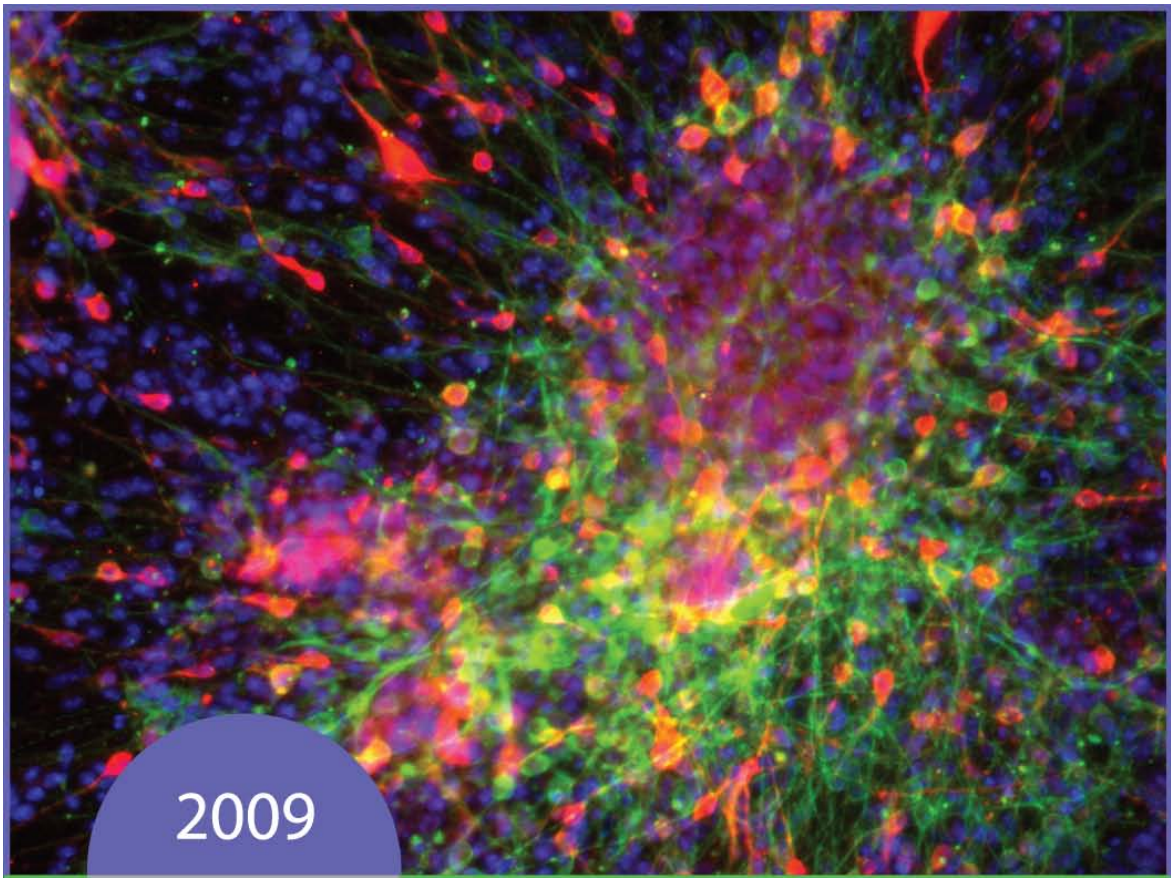
Total estimated cost - \$4.5 million

Initiative: Stem Cell Research and Society: Implications and Impact

Significance and Objectives

Stem cell research not only offers the possibility of medical benefit, but will also influence society in other ways. Stem cell research raises important ethical questions. Some are related to egg donation. What are the medical and psychological consequences of donating eggs for research? Are current informed consent procedures adequate? Do donors understand what they are agreeing to? Other questions relate to how stem cells are used. Is privacy protected? When does xenotransplantation raise ethical questions? When stem cell therapies become available, other types of questions will arise. If therapeutic material is limited, who will decide and how will it be decided which patients receive treatment? How can the entire population be served regardless of genotype? How will stem cell therapies be paid for? Many of these issues raise questions of law and public policy. To address these matters, CIRM will sponsor both empirical research and also may sponsor studies or conferences that will take a more theoretical approach.

Appendix B



2009

2010

REPORT ON OPERATIONS

Supplemental to the Strategic Plan Update



relationships with other institutions; and the scientific vision guiding the Agency's delivery of its mission. Doing so requires continuous knowledge of CIRM's primary activities and involves close communications with the Chair of the Governing Board, Vice President of Operations, Vice President of Research and Development, and other executive staff. The President aims to direct CIRM by drawing the best from all members of staff. Simply put, the Agency operates as an integrated, ambitious program, committed to supporting the relationships required to achieve its mission. The president acts to leverage California's scientific and medical assets by creating a national and international network of the world's leading stem cell research scientists and clinicians, working together to advance the medical and scientific mission of proposition 71.

COMMUNICATION AND EDUCATION

CIRM'S RESPONSIBILITY TO THE PUBLIC

California's public and financial support comes with a responsibility to keep the entire community informed about CIRM's activities and accomplishments. This requires more than a passive posting of grants awarded. To be well informed about CIRM's scientific mission and how funds are being invested to improve human health, the public must first understand some basic information about stem cell research and why broad and sustained funding is critical to advancing this research from the laboratory to patient care. Armed with sufficient background information and realistic reports of progress, citizens can put into perspective the research results achieved through CIRM funding and recognize the true hope they represent.

To this end, CIRM has launched a broad-based communication and public education effort. The aim is to address the general public and several niche audiences, including the media, patient advocacy organizations, researchers, legislators, and business leaders. CIRM plans to reach each audience through multiple channels: face-to-face communication, print media, and especially the Web. Many members of the Science Office, as well as CIRM grantees, are being called upon to increase opportunities for face-to-face education and outreach.

Since March 2008, CIRM has been enhancing the content on its Website to include more information about stem cell research in general and CIRM-funded research in particular, with links to related content on many of the CIRM-funded institutions' Websites. In May 2009, CIRM brought online an entirely new Website that represented the first phase in building a mini stem cell university on the Web. CIRM hopes to engage enough outside resources and new, in-house-produced content to make its Website a definitive resource for anyone who wants to learn where new research results have taken the field and to put those results into perspective. Because many people have become accustomed to learning by video, the CIRM Website now also includes information in this format from leaders in the field on a wide range of topics and issues within stem cell science.

REACHING OUR AUDIENCES

For patient advocates: CIRM expects the new “For the Public” landing page off the Website to become a valued resource. Much of its content is searchable by disease, and individual stories will maximize Web learning by providing links to researchers’ home pages and related video, images, research papers, and press releases. CIRM plans to collate materials related to specific diseases and use them as a basis for in-person meetings with advocate leaders, to enlist them in further disseminating CIRM content and to create links back to CIRM and its Facebook page. The eAlerts list serve system and a new Really Simple Syndication (RSS) feed system will play key roles in this effort.

For business leaders: CIRM is reviewing the knowledge about and attitudes toward the Agency among business leaders to help direct communication activities within this niche. Two information-exchange sessions for industry held in September 2007 were rated as valuable as were two sessions associated with reviewing this plan in February 2009. CIRM’s leadership frequently accepts and seeks opportunities to speak to business groups in California. For the biotech community, CIRM expects the “For Researchers” landing page on the new Website to be a useful tool for tracking RFAs and grant awards.

For State Executive Officers: The office of the Chair and the Director of Communications will organize briefings for the constitutional officers and their staff, many of whom will be encouraged to sign-up for the RSS feed to stay apprised of CIRM activities. In-person meetings will continue on a frequent basis with CIRM’s government relations representative, and periodically with CIRM senior executives.

For the legislative community: CIRM plans to conduct advocacy workshops on pending federal and state legislation to assemble information on the potential influence of these legislative measures on stem cell therapies and the ability to access patients. CIRM will organize briefings for legislators and their staff, many of who will be encouraged to sign-up for the RSS feed to stay apprised of CIRM activities. In-person meetings will continue on a frequent basis with CIRM’s government relations representative, and periodically with CIRM senior leadership and board members. CIRM is building a rapid response team to answer legislative requests and to effectively assimilate legislative input.

For the media: CIRM has begun augmenting its traditional press releases, and those produced by grantee institutions, with video segments. These clips will feature certain faculty describing science at a lay level and employ compelling visual images suitable for TV to convey the excitement that stem cell science holds for the future of medicine.

The media are a significant conduit of information to the general public, and journalists need to understand a broader perspective of the field than that afforded by daily news coverage. Thus, an important component of CIRM’s mission is to offer the media educational opportunities. More than 30 journalists

attended CIRM's first writer's seminar on September 17, 2008, where 9 guest speakers presented on a wide variety of topics in stem cell research. Beyond educational seminars designed specifically for media, we will also consider implementing mini-fellowship programs offering hands-on lab experience.

For the science and medical community: CIRM communicates with grantees and partners through a grantee conference and by posting critical information online. CIRM encourages the involvement of scientists in education programs for elementary, high school, and undergraduate students, postgraduates, and the general community and plans to include early-stage career scientists in a wide range of communication and education activities. CIRM will be developing a Web 2.0 portal during 2009 to serve as an on-line community for CIRM grantees to exchange information.

For the Governing Board: Continuing education of the Board is an important component of CIRM's communications strategy. Efforts include regular "Spotlight on Disease" sessions in which clinical and basic scientists, alongside patients, discuss current progress in the research and treatment of specific diseases and injuries. In addition, snapshots of research advances in stem cell science are provided regularly at Board meetings by the President, with summaries of the presentations posted on the Website. The CIRM scientists and other members of CIRM staff also provide updates on new discoveries, clinical developments, IP, and other important developments in the field as they occur.

For the general public: The CIRM Website will serve as the primary communication tool between the Agency and general public. In addition, CIRM is creating opportunities for leaders and researchers in the field to speak before live audiences. For example, in March-April 2009, CIRM held three Town Forums – one in San Francisco, one in San Diego and one in Los Angeles that drew approximately 600 attendees. CIRM's goal is to hold at least one town forum each year in three regions of the state.

To promote interactive learning, CIRM is considering issuing an RFP to develop a portable, multimedia display on stem cell research that can be used prior to and after future Town Forums, at grantee institutions, and in CIRM's lobby.

CIRM will work directly with the educational community, and in particular with high school science teachers, to create educational modules that can be used broadly in the schools at multiple levels. A Request for Proposals to develop these materials may be issued in 2009 pending analysis by staff and review by the board.

To reach international audiences, CIRM's Chief Communications Officer serves on the International Society for Stem Cell Research's (ISSCR) public education committee. The committee fosters the dissemination of teacher materials and the development of Web educational content and also organizes a public symposium at the annual ISSCR meeting.

MAKING COMMUNICATIONS HAPPEN

CIRM has hired a communications staff, bringing to the Agency significant experience in science communication, media relations, Web content development, and video storytelling. An additional communication expert on contract handles special projects, and a public relations agency enhances targeted media placement. For some audiences, in particular government ones, this communications team provides message development support for the government relations' team in the Office of the Chair who manage the relationships.

In addition, CIRM's communication team has significantly extended the reach and impact of its communications efforts by enlisting the public information officers of grantee institutions, thereby creating a virtual statewide public education effort focused on stem cell communications. Press releases are cross-posted on both CIRM's and these institutions' Websites and collaboration across institutions makes most of the video products possible. Liaisons extend to national and international scientific organizations and patient advocacy organizations with which CIRM coordinates communication and key messaging.

ETHICS AND COMPLIANCE

ETHICAL STANDARDS AND PROCESSES FOR REVISION

Before CIRM developed its own policies, the Governing Board adopted the National Academies' Guidelines for Human Embryonic Stem Cell Research as interim regulations for its grants. The Academies' guidelines were considered the gold standard for the ethical conduct of hESC research when they were announced in April 2005. When CIRM's Governing Board adopted these guidelines in May 2005, California became the first state to employ them as interim regulations.

In just over a year, the Standards Working group held eight public meetings to develop its final recommendations for CIRM's own guidelines. They represent the first comprehensive set of state regulations to implement and build on the Academies' guidelines.

CIRM's Medical and Ethical Standards (MES), which took effect in October 2006, provide comprehensive regulation of CIRM-funded research. Proposition 71 requires CIRM's Medical and Ethical Standards Working Group (SWG) to meet at least four times per year to consider the need for new standards and to periodically re-evaluate existing standards in light of developments in stem cell science and in national standards for research ethics.

The SWG has recommended a number of revisions to CIRM regulations that have enhanced CIRM-funded researchers' ability to use tissues, cells, cell lines, and blastocysts. For example, in 2008 the Group recommended amendments to