



A Playbook for Effective Cluster Hiring

16 Imperatives for Planning and Implementation

University Research
Forum





EAB

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University Research Forum

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Supporting Members in Best Practice Implementation

Resources Available Within Your Membership

This publication is only the beginning of our work to assist members in growing the research enterprise. Recognizing that ideas seldom speak for themselves, our ambition is to work actively with members of the University Research Forum to decide which practices are most relevant for your organization, to accelerate consensus among key constituencies, and to save implementation time.

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Executive Summary

Definition

Cluster hiring is defined by the Urban Universities for HEALTH as "...the practice of hiring faculty into multiple departments or schools around interdisciplinary research topics."¹

Key Observations

Administrators agree that cluster hiring can serve as a valuable strategy for growing the research enterprise and fostering interdisciplinary collaboration. But despite growing interest in cluster initiatives, far too many fail due to a lack of appropriate planning. To increase effectiveness, administrators should proactively prepare for each of the six stages of the cluster hiring process:

1. Allocate Funding
2. Select Clusters
3. Execute Searches
4. Support New Faculty
5. Grow the Cluster
6. Assess Outcomes

First, institutions should plan for the significant financial investment that cluster hiring initiatives require. Administrators can ensure internal support by linking cluster hiring to their institutional strategic plans and generate external support by embedding cluster hiring in a capital campaign. While clusters may attract some external funding, they will never pay for themselves. Institutions should expect that there will always be ongoing costs associated with these initiatives. As a result, administrators should diversify their funding sources to prevent overreliance on a single source and ensure that cluster hiring does not detract from traditional departmental hiring.

Getting buy-in from stakeholders is challenging, but clear communication and transparent policies can garner greater support. Administrators should clearly articulate the value of cluster hiring to faculty, departments and schools, and the institution as a whole. When doing so, they should emphasize that cluster hiring is supplemental to traditional departmental hiring. Additionally, institutions should establish clear criteria for clusters and a transparent selection process that incorporates stakeholder input. This process helps faculty submit high-quality proposals and reduces the perception that the initiative is a central control mechanism.

Including cluster representatives on the hiring committee and developing a balanced search strategy boosts the effectiveness of cluster hire searches. Incorporating representatives from the actual cluster increases the likelihood that the cluster, rather than individual departments or schools, is prioritized throughout the search. Balancing the number of hires, junior and senior faculty members, and disciplines represented in the cluster when executing a search can help increase future productivity and avoid cluster collapse.

Better aligning policies and providing cluster hires with additional support reduces retention issues and promotes faculty engagement and productivity. Administrators should create cross-disciplinary tenure and promotion processes for cluster hires so that cluster participation is not detrimental for junior faculty career development. Establishing clear expectations for balancing departmental and cluster obligations can reduce the burden on new cluster hires. Creating mentoring and networking opportunities specifically designed for them also eases their transitions.

1) Urban Universities for HEALTH, *Faculty Cluster Hiring For Diversity and Institutional Climate*, 2015, http://urbanuniversitiesforhealth.org/media/documents/Faculty_Cluster_Hiring_Report.pdf

Growing clusters requires a sustainable funding model and infrastructure investment. Since administrators cannot continue adding lines indefinitely, they should utilize a cost-sharing model to increase the financial sustainability of cluster initiatives. Institutions should also assess their infrastructure capacity prior to launching a cluster initiative and proactively gather information about cluster infrastructure needs during the proposal process.

Maintaining ongoing support for cluster hiring initiatives requires that institutions better assess cluster performance. Institutions should develop several standardized performance metrics in addition to requiring individual clusters to generate their own criteria. Reviewing individual clusters and the cluster initiative as a whole at least once every five years allows administrators to target improvements and make sunseting decisions.

Launching Cluster Hiring Initiatives

Careful Start-Up

The vast majority of administrators agree that cluster hiring is an important strategy for growing the research enterprise and obtaining high-quality faculty. But despite growing interest, too many cluster hiring initiatives fail due to a lack of appropriate planning. To increase effectiveness, administrators should proactively prepare for each stage of cluster hiring. As Eileen Strempel at the University of Cincinnati explains, careful start-up can reduce the likelihood of future challenges.

“

“It’s all in the pre-work. Most of the issues that have come up could have been solved with a more careful launch...”

understanding all of the different areas that need to be clarified, ranging from various components of the budget (permanent salary and one time start-up packages), tuition revenue splits, and establishing faculty expectations, especially around the promotion and tenure criteria and process. It’s also important to determine a shared set of metrics to evaluate the success of the cluster. Basically, the more you determine before you engage in any hiring, the better.”

Eileen Strempel, Senior Vice Provost for Academic Affairs
UNIVERSITY OF CINCINNATI

”

Using This Playbook

Who Is This Report For?

Cluster hiring initiatives typically require involvement from a variety of stakeholders across institutions – central administrators, deans and department chairs, cluster leaders, cluster faculty members, representatives on cluster hiring committees. Each of these groups plays a role in planning and implementing cluster hiring initiatives. As a result, this playbook serves as a useful tool for all stakeholders involved in the cluster hiring process.

Institutions considering launching cluster hiring initiatives should use this report to better understand what these initiatives entail and plan for their implementation. Universities that have already started cluster hiring can consult this playbook to improve the effectiveness of their initiatives.

An Increasingly Valuable Hiring Strategy

Changing Research Enterprise

See the Academic Affairs Forum's study *Competing in the Era of Big Bets: Achieving Scale in Multidisciplinary Research*, available on eab.com.

Disconnect Between Departmental and Strategic Goals

In response to declining federal funding and intensified grant competition, universities are increasingly turning to other funding sources such as businesses and donors. These investors care about research that impacts lives and addresses global problems. To compete for their support, institutions have shifted their strategic goals to better align with these interests.

Universities recognize that if they are going to tackle the world's biggest problems, they need to build interdisciplinary research teams. In many cases, this means hiring new faculty who will collaborate across departments and schools. However, current departmental hiring strategies, which focus on disciplinary coverage, do not always align with these institutional objectives. The perfect interdisciplinary hire may not be the top departmental pick.

Commonly Cited Benefits of Cluster Initiatives



Foster interdisciplinary collaboration



Obtain new sources of external funding



Tackle and even lead Grand Challenge initiatives



Increase engagement with government and businesses



Raise an institution's public profile



Achieve critical mass of faculty



Attract high value new faculty

Growing Popularity

New Initiatives, New Culture

Many universities have therefore started simultaneously hiring several faculty members across multiple colleges and departments around interdisciplinary research topics. This "cluster hiring" allows them to create larger, multidisciplinary research teams and bring in faculty who advance institutional rather than just departmental priorities. At North Carolina State University, the strategy marks a shift in hiring culture from departmentally-focused to interdisciplinary-focused.²



Hiring Culture

"For a dozen decades, NC State faculty members have been hired to fill the needs of specific departments and academic disciplines...[T]he cluster program was designed to make genetic modifications to the longstanding culture of NC State."

Tim Peeler, "Clusters Create New Campus Culture" (9/19/2013)

Cluster hiring has been a strategy for many years, but recent changes in the funding landscape have elevated its strategic importance for growing the research enterprise. Within the past decade, an increasing number of institutions have launched cluster hiring initiatives. These have varied widely in number of hires and type of research clusters. Yet, most clusters fall into familiar topical categories that span disciplines and bridge departmental siloes.

2) Tim Peeler, *Clusters Create New Campus Culture*, 2013, <https://news.ncsu.edu/2013/09/cluster-hires/>

Recent Cluster Hiring Initiatives

University	Start Date	Planned Hires	Clusters
University of Wisconsin Madison	1998	140	49
Florida State University	2006	200	25
Florida International University	2007	17	9
North Carolina State University	2011	75	20
University of Illinois Chicago	2012	8	7
Notre Dame University	2013	80	10
University of California Riverside	2014	300	33
University Central Florida	2015	33	6
Dartmouth College	2016	30	10

Lacking Guidance

Clusters Offer Benefits and Pose Challenges

While administrators readily identify the potential benefits of cluster hiring, many may not understand all the challenges that come with these initiatives. Administrators that have gone through the process often express that they did not appreciate and anticipate the fundamental changes to existing processes and policies that cluster initiatives require. Few had the foresight to thoroughly plan for cluster implementation and evaluation. Drawing on their collective wisdom and experiences, this playbook provides institutions with a guide for more effectively planning and implementing cluster hiring initiatives.

Commonly Cited Challenges of Cluster Initiatives

 Drawing resources away from departmental hiring

 Lack of support for new hires

 Opaque policies and processes

 Unsustainable in the long-term

 Poor communication and collaboration across siloes

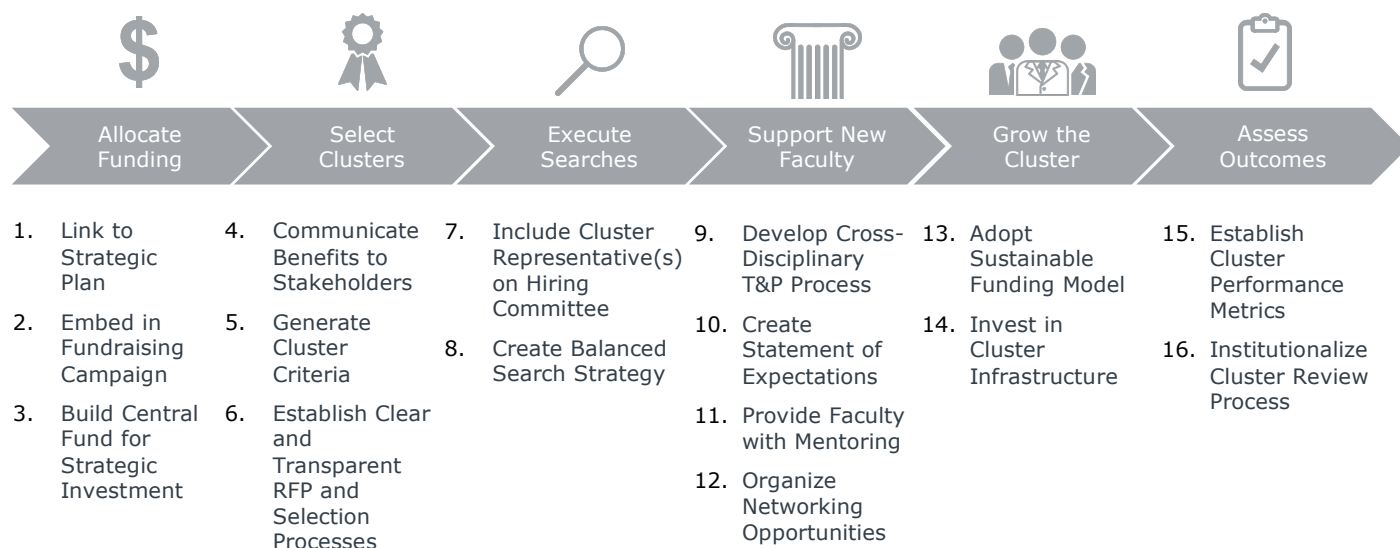
 Difficulty assessing effectiveness

 Imbalanced clusters

Increasing Effectiveness

16 Imperatives for Planning and Implementation

Enacting cluster hiring initiatives is always going to be challenging due to the tensions between interdisciplinary clusters and traditional departments and disciplines. However, institutions can increase their effectiveness by planning for each of the six stages of cluster hiring, for which there are a number of recommended imperatives for executing and avoiding common pitfalls.



Building a Strong Financial Foundation



I. Allocate Funding

Most universities recognize the benefits of cluster hiring but fail to fully anticipate the costs. Central administrators often realize too late that they do not have sufficient resources to support cluster hires without detracting from traditional hiring. In many cases, they simply run out of funding before they can complete all their planned hires.

A strong financial foundation means anticipating start-up and ongoing costs and securing sources for short and long term funding. Institutions cannot simply reallocate existing departmental hiring funds to cluster hiring – these initiatives require incremental funding.

To ensure proper funding for cluster hiring initiatives, institutions should **link the initiatives to their strategic plans, embed them in a fundraising campaign, and build a central fund** for strategic investment.

1. Link to Strategic Plan

Clearly linking cluster hiring initiatives to the advancement of strategic goals is critical to obtaining funding. Most institutions already include goals of “research excellence” or “faculty growth and development” in their strategic plans. Cluster hiring can easily fit into one or both of these categories as a strategy for helping to achieve such objectives. Effective administrators use this to justify explicitly referencing cluster hiring in the strategic plan, which communicates to the entire campus that cluster hiring is a top institutional priority rather than an isolated side project. This enhances the legitimacy of the initiative and can reduce pushback.

Creating a clear connection between cluster hiring and the strategic plan offers a number of benefits for administrators and faculty:

- Minimizes the challenges that arise when leadership turns over
- Ensures cluster hiring is viewed as a long-term institutional priority
- Increases the visibility and legitimacy of the initiative to internal and external stakeholders
- Improves the odds of acquiring financial support
- Provides administrators and cluster faculty with evidence of institutional support when applying for external grants or working with outside businesses

When Florida International University (FIU) developed its *BeyondPossible2020* Strategic Plan³ (2015-2020), one of its main objectives was to obtain the highest Carnegie-related classification of research. Another key goal was to measurably increase research expenditures from \$130 million in 2014 to \$200 million by 2020. FIU recognized that in order to achieve these goals, it would need to attract, support, and retain outstanding faculty. FIU utilized cluster hiring as a strategy.

3) Florida International University, *FIUBeyondPossible2020 Strategic Plan*, 2015, <https://stratplan.fiu.edu/docs/Strategic%20Plan.pdf>



Case in Brief: Florida International University

- Public Institution located in Miami, Florida
- Doctoral Universities: Highest Research Activity
- \$171M in research expenditures (fiscal year 2015-2016)
- Two of the key goals of the *FIUBeyondPossible2020* Strategic Plan (2015-2020) were to achieve the Carnegie Very High Research designation⁴ and increase research expenditures to \$200M
- Explicitly linked Cluster Hiring Initiative to these goals in its strategic plan

In *FIUBeyondPossible2020*, FIU noted that the cluster hire areas of biomedical engineering, medical physics, neuro-immune pharmacology, and child mental health had generated \$48 million in research awards between 2008 and 2014. Moving forward, the plan stated that FIU would reserve 25% of vacant lines specifically for cluster hiring. These hires would continue to focus on STEM areas and support the growth of research expenditures. Additionally, they would connect to other established, interdisciplinary Organized Research Units (ORUs) and preeminent programs.



FIUBeyondPossible2020

Objective: Carnegie Very High Research Designation

"Goal 1: The university will strive for the highest Carnegie-related classification of research, Very High Research (VHR). In the process, it will establish FIU as an interdisciplinary solutions center for the local community and beyond."



"Strategy B: Increase research faculty in strategic areas through the Faculty Cluster Hiring Initiative and Postdoctoral Fellows Initiative."

"Goal 2: FIU will increase its sponsored research expenditures from \$130 million to \$200 million annually. Strategies for VHR Classification attainment will also support this goal."



"Strategy A: Strategic hiring of faculty through cluster hiring and hiring faculty with sponsored research funding potential as a criterion."

FIU succeeded in achieving the top rank in Carnegie research classification in 2015. Provost Kenneth G. Furton credited this success to FIU faculty, including the cluster hiring strategy.⁵

4) As of 2015, the Carnegie "Very High Research" was replaced by "Highest Research Activity"

5) Isabel Gamarra, *FIU achieves top rank in Carnegie research classification*, 2016, <https://news.fiu.edu/2016/02/fiu-achieves-top-rank-in-carnegie-research-classification/96872>

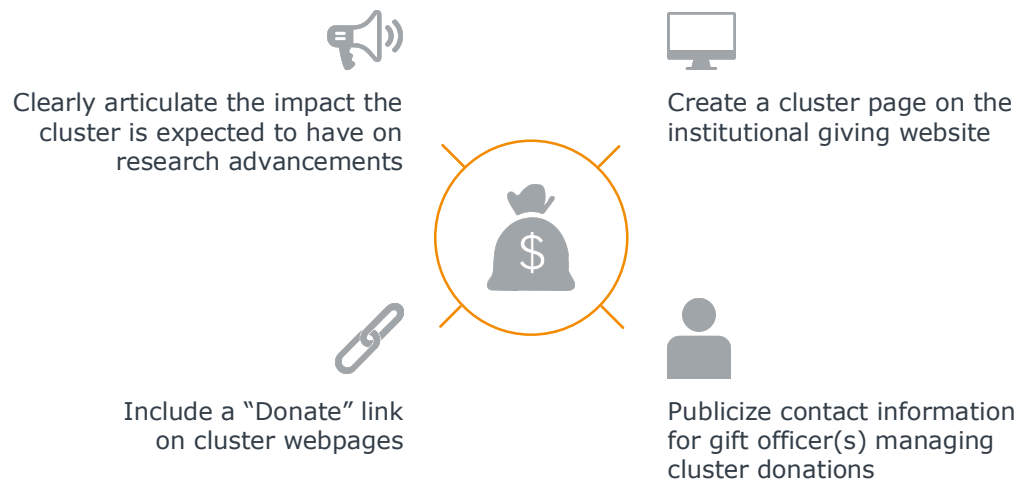
2. Embed in Fundraising Campaign

Similarly, embedding cluster hiring in an institutional fundraising campaign directly communicates the value of the initiative to donors.

Given donor interests in real-world impact and interdisciplinary solutions to global problems, cluster hiring initiatives are particularly well-suited to attract philanthropy. Integrating cluster hiring within an existing institutional campaign also has the added benefit of reducing the fundraising burden placed on cluster administrators.

For this to be effective, institutions must ensure that the link between cluster hiring and the fundraising campaign is highly visible and actively promoted in all cluster and campaign communications and events.

Four Strategies for Embedding Cluster Hiring in Fundraising Campaigns



Central administrators should also consider facilitating direct connections between cluster leaders and advancement officers. Cluster faculty can serve as key allies in capital campaigns since they are centrally involved in compelling, impactful projects that can appeal to donors. But most faculty have not been taught how to best promote their research to non-academic audiences. Advancement staff can provide them with training and opportunities to practice "pitching," which could benefit campaigns, the cluster, and the faculty themselves in the long run.

3. Build Central Fund for Strategic Investment

Finally, given the large start-up costs associated with cluster hiring initiatives, central administrators must acquire a pool of funding to cover the initial investment. While cluster initiatives may attract some external funding, it will never be sufficient to completely cover all costs. Administrators should therefore anticipate constant ongoing internal costs and institutional funds needed for cluster initiatives.

But institutions cannot rely solely on existing funds for cluster hiring. Instead, they need to seek new funds to make these initiatives survive long-term. It is critical that administrators draw on a variety of sources for cluster hiring. This symbolically affirms the widespread support that the institution has garnered for cluster hiring and ensures that no single party bears the full cost. Furthermore, it prevents institutions from becoming too reliant on a single source, such as state funds. Funding diversification also demonstrates to faculty that cluster hiring is not exclusively drawing resources away from the fund for regular departmental hiring. Common funding sources for cluster hiring include new state funds for faculty hires or tuition revenue increases.

When drawing resources from new sources, administrators should be careful to do so in a way that is clearly defensible and does not alienate key allies. For example, institutions should avoid requiring all colleges and schools to contribute financially to cluster hiring initiatives if they will not all directly benefit from a cluster hire. This often frustrates deans and can cause them to withdraw their support for the initiative as a whole. Instead, institutions could guarantee that in exchange for a financial contribution, every college would receive at least one cluster hire. Alternatively, they could use a “pay-to-play” model in which college-level contributions are delayed until after cluster selection.

Generating a war chest for initial investment is only the first half of the equation. Unfortunately, this fund will not last in perpetuity. Administrators therefore must also plan for long-term sustainability to grow the cluster, discussed later in this publication.

Creating Clear Selection Processes and Policies



II. Select Clusters

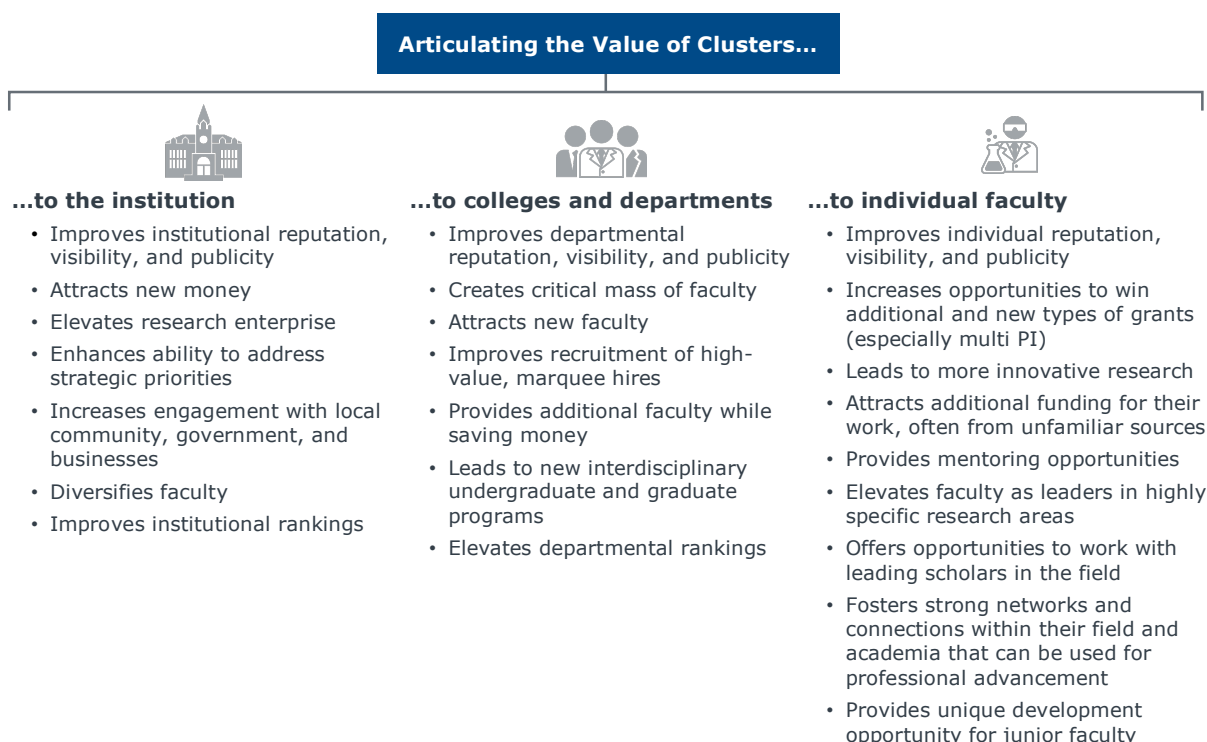
After allocating funding, the second stage is actually choosing the clusters to invest in. Administrators that have enacted cluster hiring initiatives often remark that they underestimated the importance of developing clear and transparent selection processes and policies. Their opaque cluster hiring initiatives prompted onlookers to assume that senior administrators were trying to dictate a certain research agenda and increase their own power. This provoked skepticism and opposition from faculty and deans alike.

To avoid this potential pitfall, administrators should widely **communicate the benefits** of the initiative to all relevant stakeholders, **generate explicit cluster criteria**, and **establish clear request for proposals (RFP) and selection processes**.

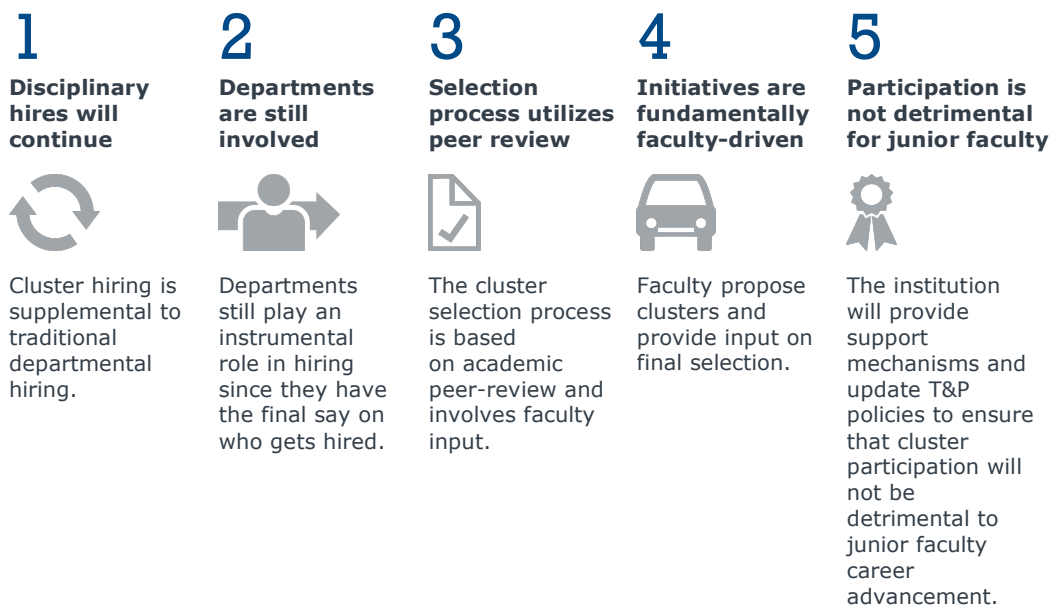
4. Communicate Benefits to Stakeholders

When it comes to cluster hiring initiatives, experienced administrators generally feel that there is no such thing as too much communication. Yet, most administrators communicate poorly and far too infrequently, which causes pushback. If administrators effectively communicate the benefits of cluster hiring to different campus stakeholders, they can debunk the myths surrounding cluster hiring and get ahead of potential critiques. Moreover, they can demonstrate that the institution has a clear rationale and thoroughly conceived plan for the initiative.

Administrators often falsely conclude that the value and need for cluster hiring is obvious to deans, department chairs, and faculty members, but this is rarely the case. Since cluster hiring is planned and enacted centrally, departments and faculty may assume there are few individual- or unit-level benefits. Administrators should not only clearly explain how cluster hiring will advance the institution as a whole, but also potentially benefit stakeholders personally.



In particular, there are five key points that administrators should repeatedly emphasize in order to minimize faculty concerns.



5. Generate Cluster Criteria

Despite the increasing number of institutions using cluster hiring, surprisingly few have actually identified specific objectives for their initiatives and far fewer have developed concrete criteria by which cluster proposals are evaluated and selected. But establishing and advertising clear cluster criteria is critical for eliminating the perception that cluster hiring is an arbitrary, centrally-controlled process. Clear criteria also help faculty members submit stronger proposals and provide administrators with a baseline for evaluating cluster performance down the line.

Cluster criteria should align with institutions' specific goals and missions for cluster hiring. When generating criteria, administrators should ask themselves the following questions:

1. What are the objectives of our cluster hiring initiative?
2. How does our cluster hiring initiative relate to our institutional strategic goals?
3. What do we want our clusters to accomplish, both in the short term and long term?
4. How narrow or broad do we want our cluster topics to be?
5. What limitations and/or restrictions do we want to place on our clusters (e.g., size, composition)?
6. What are our expectations for interdisciplinary representation and collaboration?

Although cluster criteria vary across institutions, a review of institutional RFPs reveals several common themes. These themes provide insight into how the majority of institutions are conceptualizing their cluster hiring initiatives and selecting their clusters.

See the University Research Forum's study *For the Greater Good: Boosting the Value of Industry Partnerships*, available at eab.com.

Common Cluster Criteria

- Advance an area of existing institutional strength
- Align with university priorities
- Gain regional, national and/or international prominence in a certain area
- Address the needs of the state and/or regional priorities
- Enhance institutional visibility and/or reputation
- Solve major global problems (e.g., a grand challenge)
- Generate external funding, support, and partnerships
- Foster truly interdisciplinary collaboration across multiple schools and colleges
- Attract diverse faculty

Administrators should not adopt all of these sample criteria simply because other institutions utilize them. However, these criteria can serve as a starting point when developing more detailed criteria. By adapting and adding specificity to select criteria, administrators can quickly adapt them to align with their unique institutional context and goals.

6. Establish Clear and Transparent RFP and Selection Processes

If administrators want faculty to see the value of and participate in cluster initiatives, they need to articulate specific expectations for cluster proposals, the review process, and the anticipated timeline for selection and hiring.

A well-structured and thoroughly detailed cluster RFP can minimize faculty frustration and streamline the cluster selection process. Yet, most institutions issue RFPs that provide little context or information about the actual cluster hiring initiative.

To maximize transparency and help faculty submit stronger proposals, administrators should include ten key components in their RFPs:

1. Overview and purpose of the cluster hiring initiative
2. Anticipated number of clusters and hires
3. Quantity and sources of funding provided for cluster hires
4. Cluster criteria used to evaluate proposals and select clusters
5. Explanation of the full application process
6. Cluster proposal components and template
7. Selection committee and process
8. Timeline for selection and hiring
9. Contact information for questions
10. Alternative funding opportunities for proposals that are not selected

Item six, required components of cluster proposals, demands special attention. Many institutions fail to collect sufficient information in cluster proposals. While many proposed clusters may sound interesting and valuable, administrators need to understand how they relate to the overall cluster objectives and determine whether the proposed clusters are actually feasible, worthwhile investments. To ensure that they get all of the information they need to make informed decisions, institutions

should provide faculty with a proposal template. See pages 31 and 32 for an adaptable sample template.⁶

After strengthening RFPs and proposal requirements, institutions should then design the actual process for proposal submission, review, and selection. Experienced administrators often utilize a two-step proposal process. The first step is to have faculty submit short preliminary proposals or letters of interest. After reviewing these proposals, the selection committee then invites a handful of faculty to submit full proposals. This two-step approach reduces the initial workload for faculty and reviewers but still ensures that final proposals are fully fleshed out and sufficiently detailed.

Administrators also should structure their processes in a way that guarantees the engagement of faculty, department chairs, and deans. Otherwise, they risk stumbling blocks that may paralyze cluster hiring initiatives. One strategy is to utilize an open, campus-wide competition for cluster proposals. Soliciting ideas directly from faculty makes sure that they see clusters as bottom-up, grassroots initiatives rather than top-down administrative mandates. Furthermore, as Duane Larick at North Carolina State University pointed out, faculty are typically the best sources for identifying understudied areas within their fields that offer opportunities for institutions to advance their current research.

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“Faculty understand what we are already doing and where there are opportunities to engage. In fact, faculty are better at identifying these opportunities than any kind of quantitative data analysis we could have run. And ultimately, this process was not just about identifying emerging faculty, it was also about engaging faculty.”

Duane Larick, Senior Vice Provost for Academic
Strategy and Resource Management
NORTH CAROLINA STATE UNIVERSITY

”

To be sure that deans and department chairs will provide the necessary support for clusters, institutions should require faculty to get their approval and sponsorship prior to submitting proposals. Finally, an interdisciplinary committee composed of faculty representatives from every college and school should review proposals and either select the clusters or otherwise make official recommendations to the Provost and/or President.

6) This template is based on various institutional RFPs and/or proposal templates, including California State University, Northridge's *Cluster Faculty Initiative*, Georgia State University's *Call for Proposals – AY 2017-2018*, University of Kansas' *University Cluster Hire Proposal Form*, and University of Oregon's *Cluster Hire Application Form*.

Strategies for Hiring Cluster Faculty



III. Execute Searches

Even when there are clear and transparent processes for soliciting proposals and selecting clusters, administrators often still encounter challenges in the search process. They report that the search process is particularly slow and time-consuming since they are not accustomed to coordinating across multiple schools and departments. Along with these logistical challenges, administrators rarely develop coherent hiring strategies in advance. This failure to plan for faculty searches can lead to imbalanced and therefore less productive clusters.

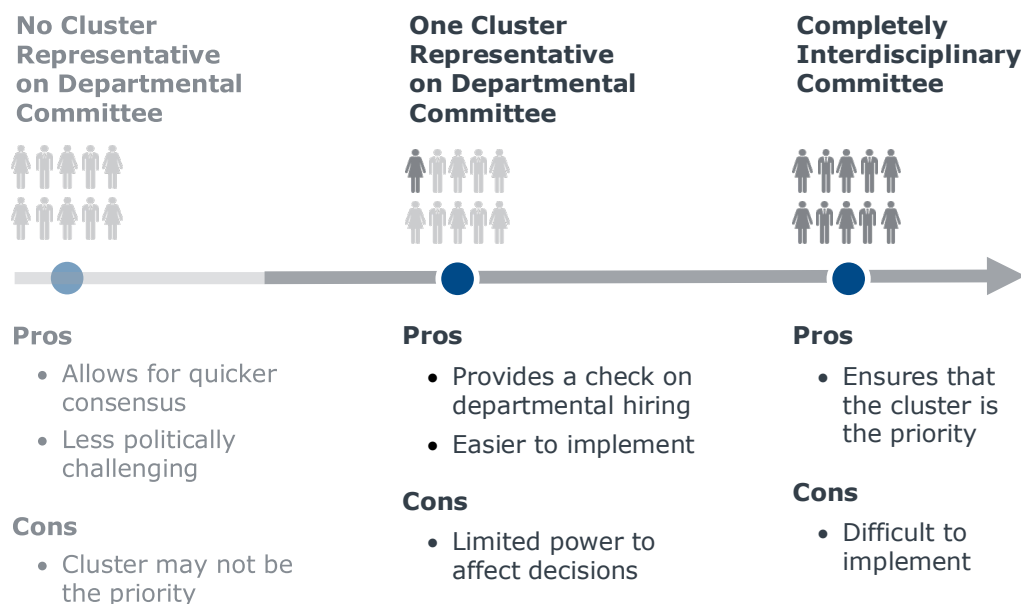
To more effectively execute searches for cluster hires, administrators ought to **include cluster representatives on the relevant hiring committee** and **create a balanced search strategy** that considers cluster size, composition, and leadership.

7. Include Cluster Representative(s) on Hiring Committee

Because cluster hires participate in multiple departments, centers, and institutes, traditional departmental hiring committees are not always the optimal search mechanism.

At the most extreme end of the spectrum, institutions can develop a completely interdisciplinary committee for cluster hires that is separate from traditional departmental committees. It could include five to ten members, with the majority of them being faculty representatives from the cluster and all relevant departments and schools. This model has the advantage of guaranteeing that all potential stakeholders have a say in the hiring process. Additionally, it ensures that the cluster, not individual departments or schools, is the priority.

Admittedly, not all institutions are able to create such a committee due to political or policy constraints. A more feasible alternative for these institutions is to require that *at least one* cluster representative sits as a voting member on departmental search committees. This representation can be crucial for ensuring that cluster interests are represented during the hiring process. It also prevents departments from reverting to traditional disciplinary hires.



Institutions should also consider requiring the relevant dean(s) to sit on search committees hiring cluster faculty since they typically have the authority to adjust salaries and make official offers. Without representatives who have this negotiation power on the committee, there is often an extended back-and-forth between the hire, the committee, and the administrators holding the purse strings. This prolongs the hiring process and in some cases deters prospective cluster hires.

Regardless of which of these approaches administrators utilize, departments still must approve the offers that search committees plan to make to cluster hires, and ultimately cluster hires will still be tenured in departments by a vote of the departmental faculty.

8. Create Balanced Search Strategy

After deciding on an updated hiring committee structure, administrators should turn their attention to search strategy. Many institutions fail to effectively balance cluster composition through their hiring, which ultimately limits the success of their initiatives. In particular, administrators should watch out for common cluster imbalances during the search process.

Key Issues to Watch

- Clusters overly dependent on a single star researcher
- Clusters dominated by new hires, who may take longer to acclimate or may leave the institution
- Lack of sufficient new hires to catalyze innovation
- Lack of senior hires who could have major impact on the cluster's research
- Not enough junior hires to set up the long term success of the cluster

Given the diversity of cluster goals and missions, there is no one-size-fits-all recommendation for balancing a cluster. The quantity and composition of faculty hires often varies based on the scope and purpose of the cluster itself. Nonetheless, administrators need to think through what a balanced cluster would look like at their institution in terms of size, junior versus senior faculty members, and disciplines represented.

In general, most institutions seek to hire between three and five new faculty members per cluster. These hires then join several existing faculty members to form the complete cluster team. Experienced administrators recommend that on average 40% of the cluster be new hires and 60% be current faculty members. Of course, the exact numbers differ across institutions. Regardless, the important lesson for administrators is that they need to assess current faculty interest in each cluster and gauge how many hires and which disciplines are needed to fill the gaps and build critical mass.

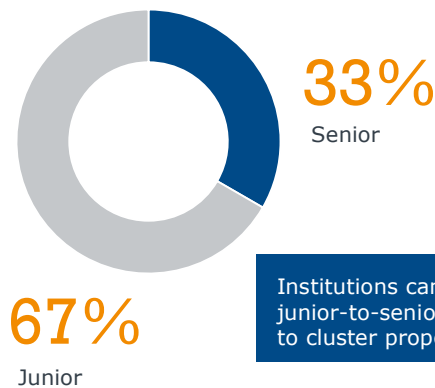
Besides the sheer number of new cluster hires, institutions also ought to consider the appropriate balance between junior and senior faculty members in a cluster. Failing to do so is the most common error that institutions tend to make during their search processes. Since both junior and senior faculty offer unique benefits to clusters, experienced administrators agree that clusters should have a mix of the two.

 Advantages	Junior Faculty <ul style="list-style-type: none"> • Less expensive (often can hire multiple junior faculty for the cost of a single senior faculty hire) • More comfortable balancing cluster and departmental obligations • Highly ambitious • Lots of potential 	Senior Faculty <ul style="list-style-type: none"> • Provide cluster with immediate credibility • Offer mentoring to junior faculty • Make the cluster immediately competitive for major grants • Already established in their fields • Attract junior faculty to the cluster • Less pressure for publication means more time for cluster work
 Drawbacks	<ul style="list-style-type: none"> • New to teaching and research • Less experience winning grants • Cluster participation requires them to take career risks • Lack of clear connection between cluster and T&P deters them • Require more development and support 	<ul style="list-style-type: none"> • Strong individual track record may be a disincentive for collaboration • More expensive • Can get recruited by other institutions with higher profiles

Building clusters with a majority of junior faculty (approximately 2/3) and a minority of senior faculty (1/3) has proven effective at many institutions. While it capitalizes on the innovation and energy of young faculty, it also ensures that the cluster has sufficient leadership. Without senior leaders to advocate on behalf of the cluster and take on administrative tasks, clusters frequently fall apart. However, institutions that hire a senior faculty member and build an entire cluster around them face the risk of the cluster becoming overly dependent on a single person and therefore vulnerable to any changes in their career or tenure at the institution.

Composition of Clusters

Junior Faculty vs. Senior Faculty



Institutions can promote this balance by stating their desired junior-to-senior faculty ratio in their RFP and giving preference to cluster proposals that meet this ratio requirement.

Cluster hiring will take longer than traditional department hiring due to the need to involve more stakeholders. Administrators report that it can take between two and five years to fully complete planned cluster hires. It may take even longer if institutions are targeting senior faculty or marquee hires. Administrators therefore need to be intentional and realistic when planning their search strategy. It is extremely important not rush the process, as this can derail the entire initiative and hinder long-term sustainability.

Search committees can use several strategies to improve their recruitment efforts and attract new faculty to the clusters. Experienced administrators recommend that cluster leaders and faculty monitor new and innovative research within the relevant fields so that they can identify and begin building relationships with promising potential candidates even before starting the formal search process. Institutions should also actively promote clusters through advertising, outreach, and networking events. Increasing cluster name recognition within academia and the relevant fields can attract additional candidates.

Tips for Recruiting Cluster Hires



Start the process early



Follow trends and developments in the field



Build buzz around the clusters



Use a courtship model



Track key figures in the field



Host and attend networking events



Build relationships with graduate and post doc students

If institutions wish to use cluster hiring for faculty diversification, search committees should anticipate the unique challenges associated with recruiting diverse faculty for clusters and proactively develop a strategy for overcoming these hurdles.

See the Academic Affairs Forum's study *Breakthrough Advances in Faculty Diversity: Lessons and Innovative Practices from the Frontier*, available on eab.com.

Cluster Hiring for Faculty Diversity

Numerous institutions have cited faculty diversification as one potential benefit of cluster hiring, with a few schools actually adopting cluster hiring with this as the primary purpose. These institutions typically seek to bridge the gap between highly diverse student bodies and less diverse faculty.



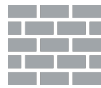
How does it work?

Hiring for a single, very narrow position (e.g., Shakespearean literature) creates a very small applicant pool, whereas broadening their search (e.g., digital humanities) leads to a much more diverse array of candidates



Sample Institutions

- University of Illinois, Chicago
- Rutgers University
- University at Albany, SUNY



Common Challenges

- Lack of agreed upon definition of diversity
- Particular difficulty recruiting senior faculty from diverse backgrounds
- Tough competition in recruitment
- Pipeline issues



Key Recommendations

- Intentionally design position descriptions and advertisements to attract a diverse applicant pool
- Provide cluster search committees with diversity training
- Build a community for new hires

Developing Faculty Support Mechanisms



IV. Support New Faculty

New cluster hires frequently express confusion and concern about expectations and the performance evaluation process. To get the most from their cluster hires, institutions should **develop a cross-disciplinary tenure and promotion (T&P) process** and provide support resources, including a **statement of expectations, mentoring, and networking opportunities**. This reduces retention issues and increases faculty productivity, thereby contributing to the long-term growth of the cluster.

9. Develop a Cross-Disciplinary T&P Process

Similar to departmental search committees, existing T&P processes are generally not designed for faculty who conduct interdisciplinary research. This is particularly concerning for junior faculty, who may avoid participating in clusters as a result. One possible solution is for administrators to establish (and communicate) a cross-disciplinary T&P process for cluster hires. At a minimum, at least one cluster representative should join the existing departmental review committee during tenure decisions for cluster hires.

Alternatively, institutions could create an entirely separate interdisciplinary review committee for each cluster hire. In this case, the committee should include representatives from all relevant home and/or joint departments involved in the cluster. While this structure is the most effective way to ensure cluster hires are given appropriate credit for their work during review, it is also the most challenging to implement because it requires the creation of entirely new processes as well as coordination across multiple departments and schools.

At North Carolina State University, for example, cluster hires choose between a traditional departmental review (with written input from cluster colleagues) and an interdisciplinary review committee. This allows cluster hires to select the policy that aligns with their research and career goals.

Traditional Process with Input	Interdisciplinary Review Committee
<ul style="list-style-type: none">• Follows existing policies• Includes one cluster representative• Invites written feedback from appropriate joint, cluster, and/or interdisciplinary faculty members	<ul style="list-style-type: none">• Appointed by the dean of the home department's college• Includes representatives from home and joint departments, cluster, and/or interdisciplinary area
Option #1	Option #2

Other institutions have experimented with granting faculty members tenure within clusters or centers themselves rather than in a specific department. In general, experienced administrators recommend against this tenure placement since both clusters and centers are not necessarily permanent. They suggest that institutions only offer tenure within an academic department.

It is important to remember that regardless of the process that institutions use to review cluster hires, the home department ultimately will still have to approve the tenure decision.

10. Create Statement of Expectations

Working across multiple departments often means teaching, research, and service responsibilities for cluster hires may be less clear. In some cases, department heads and cluster leaders assign cluster hires extra responsibilities that are overly burdensome and frustrating. Institutions can avoid this outcome by requiring cluster hires, cluster leaders, and department heads to develop statements of expectations at the outset.

While institutions should develop some pre-determined general expectations for all cluster hires, the faculty hire, home department head, and cluster leader should also develop a set of expectations specific to each faculty member. This dual contribution ensures some standardization but still allows for expectations to be individually tailored for each hire. Since the hire, department head, and cluster leader must meet in-person to develop expectations, this requirement also provides them with an opportunity to build relationships and establish communication norms.

When developing statements of expectations, there are five key components to include:

1. The approximate percentage of time the cluster hire is expected to spend in their home department versus in a secondary department, center, or institute.
2. The approximate percentage of time spent on research, teaching, and service in the cluster and the home department.
3. The mandatory versus optional activities in the cluster and the home department (e.g., meetings, professional development events, networking events).
4. The process and schedule for annual evaluation and T&P review for the cluster hire.
5. The communication channels and frequency, particularly between the cluster hire, the cluster leader, and department head.

11. Provide Faculty with Mentoring

While most institutions provide some degree of mentorship to all new faculty, it often does not meet the unique needs of cluster hires who work in multiple departments and conduct interdisciplinary research. By connecting cluster hires with suitable mentors, administrators can ease their transitions and therefore increase productivity and retention.

North Carolina State University uses a mentoring by committee model. The cluster leader and faculty members from the relevant home department develop individual mentoring plans for each new cluster hire. Providing cluster hires with multiple mentors exposes them to both departmental and interdisciplinary perspectives.

At a minimum, institutions should assign each cluster hire at least one mentor from within their cluster and one mentor from within their home department. They may also want to provide cluster hires and mentors with a calendar of expected meetings and topics for discussion. This can ease some of the burden of mentoring relationships.

12. Organize Networking Opportunities

Administrators should also help cluster hires build connections across clusters and campus. Creating opportunities for new cluster faculty to network with one another can improve retention, foster additional mentoring relationships, and increase cluster faculty engagement. Networking events also give administrators and faculty opportunities to identify future areas of collaboration between clusters.

Experienced administrators often remark that the biggest challenge associated with organizing networking events is actually getting faculty to participate. They might therefore incorporate networking into statements of expectations. But even more attractive than making it mandatory, institutions can boost faculty engagement by creating a calendar of events at strategic points throughout the semester (e.g., at the start of the term, prior to final exams and grading). This reduces the time burden on faculty and enables them to plan ahead. Designing networking events so they add value for participants also helps boost faculty interest. For example, institutions could offer professional development training or invite guest speakers to cluster networking events.

Planning for Long-Term Sustainability



V. Grow the Cluster

Many administrators struggle to sustain and grow their clusters over time. Institutions often report that start-up packages are the biggest expense associated with cluster initiatives. Investing millions of dollars in these packages limits the long-term financial sustainability of clusters. Initiatives that started successfully can also cease to produce the desired interdisciplinary research due to a lack of ongoing financial support, leadership changes, imbalances in cluster hires, or faculty drifting back to their own interests. Administrators therefore must consider broader sustainability issues from the outset – they should **adopt a sustainable funding model** and **invest in cluster infrastructure**.

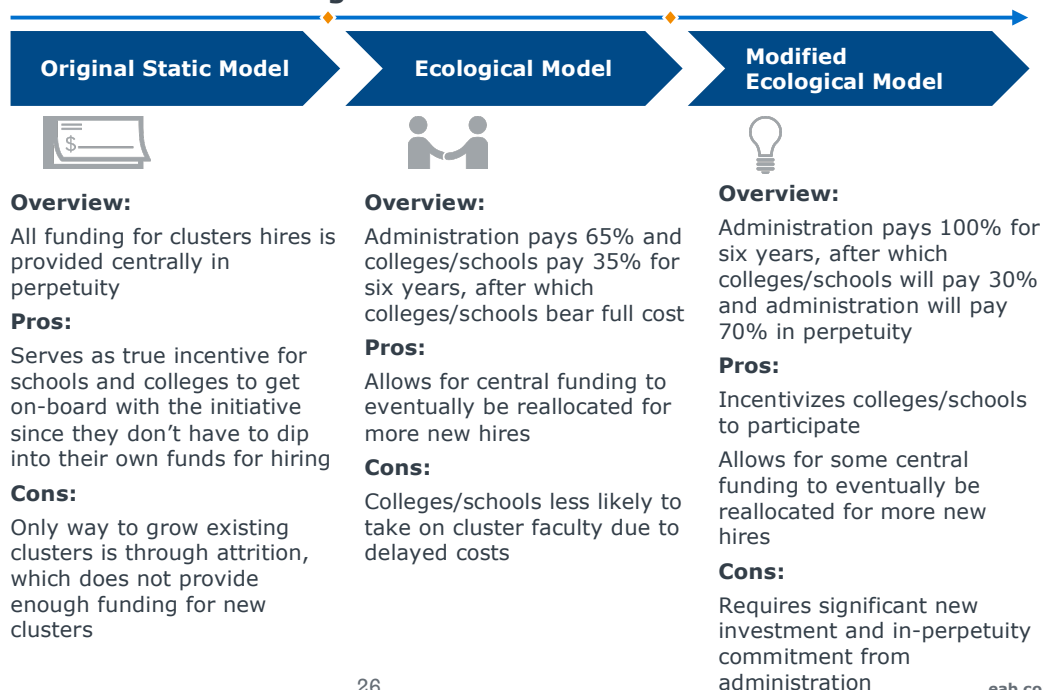
13. Adopt Sustainable Funding Model

Many administrators report that they still have not developed a long term funding model for their cluster hiring initiatives, even several years after start-up. To sustain clusters, institutions should reclaim part of their initial investment by adopting a cost-sharing model. This frequently entails the central administration shifting part of the cost of cluster hires back to the relevant colleges/departments, thereby requiring them to have some “skin in the game.” The most effective administrators explicitly specify the percentage and timeframe for central cost recovery. For example, the central office might fund 100% of a cluster hire in the first year, 75% in the second year, 50% in the third year, and so on. The department or college would increase its contribution accordingly until it is solely responsible for the cluster hire’s salary.

The University of Wisconsin-Madison provides an interesting example of how an institution can effectively monitor and adapt their cluster funding model in order to maximize sustainability. The institution has utilized two different funding models since launching its cluster initiative in 1998, with a third model slated for implementation in fall 2017.



A Sustainable Funding Model



14. Invest in Cluster Infrastructure

Administrators often overlook the infrastructure needs of clusters, such as shared equipment, research and office spaces, lab assistants, grant managers, and relevant seminar series. As a result, cluster hires can feel overburdened, frustrated, and/or disillusioned. These feelings can lead to decreased engagement, reduced productivity, and turnover in the long run.

Institutions therefore should strengthen their infrastructure and ensure that they have the necessary facilities, equipment, and staff *before* launching their cluster initiatives. For example, North Carolina State University prioritized “upfitting” facilities and equipment prior to launching their cluster initiative since doing so is crucial for faculty recruitment and productivity.⁷ Much of their focus was and still is on core facilities. After selecting clusters, NCSU then made more targeted “upfitting” efforts in the areas where the new hires would be located.

This process should start with an infrastructure audit giving special attention to grant writers, lab space, collaborative work and office space, and pre- and post-award managers. After assessing their infrastructure capacity at a campus-level, institutions can pinpoint critical gaps that they need to fill to support clusters. Additionally, they may discover currently under-utilized infrastructure and ways to reallocate existing resources.

Institutions should then proactively gather information about cluster infrastructure requirements during the proposal process. By requiring clusters to voice their needs upfront, institutions can better gauge the feasibility of the cluster and determine priority areas for future infrastructure investment. When reviewing cluster proposals, the selection committee ought to keep the following questions in mind:

See the University Research Forum’s white paper *Striving for More Sustainable Core Facilities: Five Steps for Building a Strong Foundation of Shared Resources*, available on eab.com.

- What infrastructure will this cluster require?
- What infrastructure do they/we already have?
- Is the cluster committed to sharing physical facility infrastructure?
- Does the cluster have a plan for obtaining needed infrastructure?
- What is our financial model for core facilities?

7) North Carolina State University, *Creating a Culture of Interdisciplinary Excellence: The Successful Development of a Faculty Cluster-Hiring Program at NC State University*, 2017, <https://facultyclusters.ncsu.edu/content/uploads/2017/08/18-CFEP-White-Paper-digital-1-2.pdf>

Evaluating Cluster Initiatives



VI. Assess Outcomes

While administrators often feel their cluster hiring initiatives are successful and worthwhile, very few can provide concrete, objective evidence. Most institutions do not devote sufficient attention to establishing and monitoring performance metrics. Furthermore, many of the benefits of cluster hiring are difficult to quantify and measure. However, in order to justify ongoing investments in cluster initiatives, administrators should **establish cluster performance metrics** and **institutionalize a cluster review process**. These metrics and reviews help individual clusters to target their improvement efforts and institutions to identify areas for additional investment.

15. Establish Cluster Performance Metrics

Prior to launching cluster hiring initiatives, institutions should develop baseline performance metrics that align with cluster criteria. Cluster leaders should also develop their own supplemental metrics and benchmarks in their cluster proposals. This gives them the flexibility to choose less frequently-utilized, unique metrics. Moreover, integrating baseline and custom metrics guarantees that institutions do not rely too heavily on a single measure of success.

Four Categories of Cluster Performance Metrics



Productivity

- Increased output (e.g., publications, grants, proposals) beyond what a typical disciplinary hire generates
- Growth in large-scale center/training grants
- Junior faculty winning large grants earlier in their careers
- Increase in number of multi-PI grants



Reputation

- Marquee hires
- Improvement in departmental and/or institutional rankings
- Increased share of highly-cited publications in the cluster
- Rise in altmetrics (e.g., social media, hits, press coverage)



Collaboration

- Development of new interdisciplinary graduate or undergraduate programs
- Increase in multi-PI publications
- More research connections between cluster faculty
- Cluster faculty serving as connectors between non-cluster faculty



Impact

- Increase in outreach activities
- Increase in faculty diversity
- Improved graduate placement

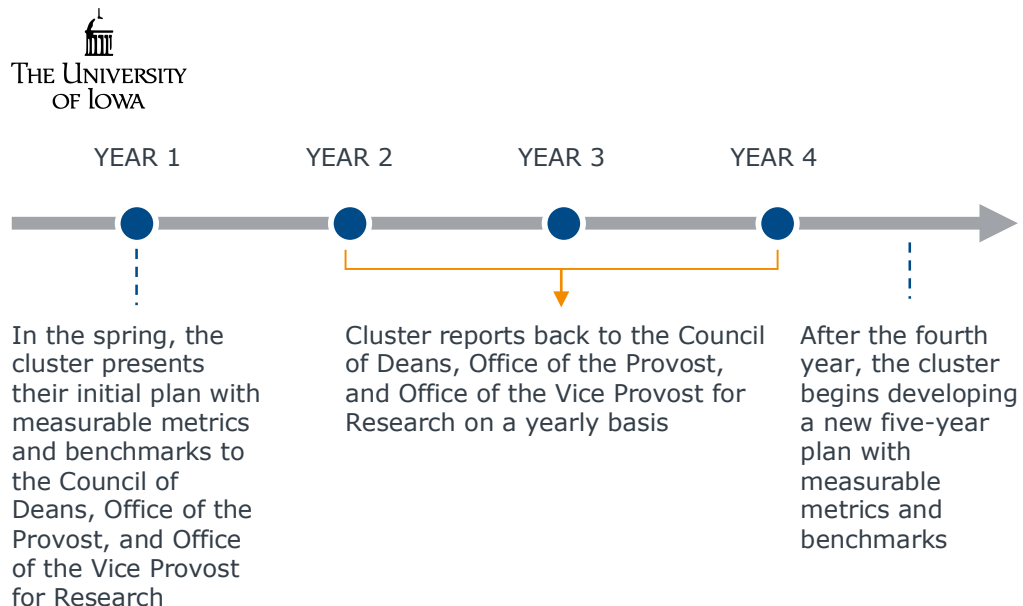
At Georgia State University (GSU), Jim Weyhenmeyer, Vice President for Research and Economic Development, and his staff have devoted increased attention to tracking cluster performance in terms of grants. However, instead of simply looking at the number of grants won by clusters, they have focused on the different *types* of grants. In particular, they are interested in whether their clusters are winning grants that have an interdisciplinary approach or component since this better indicates whether GSU has successfully built clusters of faculty who collaborate in ways that they would not otherwise. Their grant tracking shows that GSU has won more multi-PI grants from the National Institutes of Health. They also have seen an increase in center grants as compared to individual program project grants.

16. Institutionalize a Cluster Review Process

Using cluster performance metrics, administrators should then establish a formal cluster review process. This improves cluster accountability and reduces the likelihood of cluster collapse. Additionally, these reviews provide central administrators with useful information about their investment that can be leveraged when advocating for ongoing support.

In general, administrators should review individual clusters at least once every five years. Between formal cluster reviews, they can require clusters to submit annual reports.

At the University of Iowa, selected clusters develop five-year plans with measurable metrics and benchmarks. During the spring semester of their first year, clusters present their proposed plans to the Council of Deans, Office of the Provost, and Office of the Vice Provost for Research. In each subsequent year, the cluster reports back to this group of administrators on their progress. After the fourth year, the cluster develops a new five-year plan.



Central administrators should also establish expectations for “sunsetting” clusters that are not meeting performance metrics. When clusters are discontinued, funds should be returned centrally so that administrators can then reallocate resources to establish new clusters.

Along with evaluating individual clusters, institutions ought to conduct large-scale institutional reviews of their cluster initiatives as a whole. This allows administrators to identify common challenges across clusters and make general policy improvements.

Conclusions

An Ongoing Process

Disciplines and departments are the intellectual and organizational foundation of the university, but they do not always support research and hires in exciting and new multidisciplinary areas. Cluster hiring is one strategy for fostering innovation and interdisciplinary collaboration. However, it requires institutions to renegotiate the ongoing tension between disciplinary traditions, departmental goals, and strategic opportunities. Preserving departmental and disciplinary siloes while simultaneously creating mechanisms for people to work across siloes is a tall order.

If administrators follow the sixteen imperatives in this report, they can avoid many of the challenges other institutions have experienced when implementing cluster hiring and instead increase the effectiveness of their own initiatives. But even if institutions implement all sixteen imperatives, enacting cluster hiring initiatives is never going to be easy. Administrators should expect challenges to arise and therefore prepare for an ongoing, iterative process of planning, implementation, evaluation, and adjustment.

Cluster Proposal Template

[Insert instructions and information about deadline and review process]

Title of Proposal

Names of Proposing Faculty and Participating Schools/Colleges

1. Abstract/Executive Summary

Include brief overview as well as official endorsements and evidence of support from relevant schools, colleges and/or departments.

2. Rationale

Outline the rationale for the cluster. Provide evidence that the cluster is aligned with the strategic goals and/or priorities of the institution. Explain the relevance to the institution. Identify potential benefits of the cluster and its impact in academia.

3. Cluster Objectives

Describe how the proposed cluster satisfies each objective of the institution's cluster hiring initiative.

4. Governance/Leadership Structure

Identify cluster leader, potential home department(s) for the cluster hire(s), and members of cluster steering/search committee. Create plan for ensuring interdisciplinary collaboration and work. Describe strategy for managing cluster activities and meeting cluster administration needs.

5. Hiring Plan

List number of proposed hires and each new proposed position, as well as rationale for why these are necessary.

6. Position Description

Provide preliminary language for position description. Describe the desired type of research from the hire and general expectations of the hire (e.g., splitting time between home department and cluster).

7. Mentoring/Team Building Plan

Identify senior faculty who will participate in the cluster and serve as mentors, along with the general mentoring structure for new hires. Explain cluster activities (e.g., conferences, meetings, trainings) that will foster teamwork.

8. Resource Requirements

Include a budget plan with information about potential faculty salaries and/or possible ranges, desired start-up funding, and infrastructure requirements (e.g., lab space, offices, IT needs). Identify possible sources of external funding.

9. Potential Collaborations

Describe potential research relationships and collaborations for the cluster, both internally and externally.

10. Assessment Plan/Accountability Metrics

Provide metrics by which the cluster should be evaluated. Present a plan for obtaining necessary data and a timeline for evaluation.

Advisors to Our Work

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