

The Walton Family Charitable Support Foundation, Inc.
PO Box 2030
Bentonville, AR 72712

GRANT AGREEMENT TO FUND

Research and Commercialization Grant – Phase II

Grant 00103459

THIS GRANT AGREEMENT (the "Agreement") dated this 8th day of July 2020, is made by: The Walton Family Charitable Support Foundation, Inc., a Delaware nonstock, nonprofit corporation (the "Walton Support Foundation"); The University of Arkansas Foundation, Inc., an Arkansas nonprofit corporation (the "University Foundation"); and the Board of Trustees of the University of Arkansas, acting for and on behalf of the University of Arkansas, Fayetteville (the "University"), a state institution of higher education.

WHEREAS, the Walton Support Foundation is a tax-exempt organization and public charity supporting organization described in sections 501(c)(3) and 509(a)(3) of the Internal Revenue Code, and is organized and operated to support and benefit universities and colleges operating in the State of Arkansas and community foundations operating in a five-state area; and

WHEREAS, the University has submitted to the Walton Support Foundation a proposal (the "Proposal"), which is attached hereto as Exhibit A, to establish the Institute for Integrative and Innovative Research (I³R) with all its programs, including supporting Entrepreneurial Education, and build a research facility to house the I³R at the University's Fayetteville campus and establish a remote campus/facility of the U of A in Bentonville, subject to approval by the University of Arkansas Board of Trustees and relevant accrediting agencies; and

WHEREAS, the Walton Support Foundation wishes to support and benefit the University by funding the I³R as indicated in the Proposal; and

WHEREAS, the University Foundation is organized and operated to receive, manage and distribute endowment funds and other funds to support and benefit the University and otherwise exists to support and benefit the University, as indicated by the University Foundation's governing instruments and by its status as a public university support organization as described in section 170(b)(1)(A)(iv) of the Internal Revenue Code; and

WHEREAS, the University Foundation and University desire that the University Foundation accept the Walton Support Foundation's grant made under this Agreement for the Research & Commercialization Grant – Phase 2, to be held, managed and distributed to support and benefit the I³R upon the terms and subject to the conditions set forth below.

NOW, THEREFORE, in consideration of the mutual undertakings and covenants herein contained, the parties agree as follows:

1. **Grant to the University Foundation.** (a) The Walton Support Foundation hereby agrees to make a grant (the "Grant") to the University Foundation, for the University's Fayetteville campus, in the amount of one hundred, ninety-four million, seven hundred and fifteen thousand dollars (\$194,715,000.00). The purposes of the Grant are as follows:
 - (i) \$139,715,000.00 will be distributed by the University Foundation to the University to cover costs as these are incurred for the establishment of the I³R and the support of its research and programs, the construction of an approximately 75,000-100,000 square foot research facility and the establishment of a U of A Bentonville campus (the "Non-Endowed Purposes") ; and

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- (ii) \$55,000,000.00 will be held and managed by the University Foundation as an endowment (the "Endowment") making distributions for hiring and supporting the positions of the I³R Director, the five Centers of Excellence Directors and the fifteen I³R faculty as provided in this Agreement (the "Endowed Purposes").

(b) For purposes of this Agreement, the Endowment will include the \$55 million amount granted for the Endowment pursuant to this Agreement and the income and appreciation resulting from the investment of such property. The University Foundation will maintain and expend the Endowment in accordance with the Endowment categories listed in Exhibit B to this Agreement and subject to the other terms of this Agreement.

2. **Form and Timing of Grant.** The Walton Support Foundation's Grant will be in the form of cash. The Walton Support Foundation will pay the Grant as indicated below. The term "Endowed" references the funds to support the Endowed Purposes. The term "Non-Endowed" references the funds to support the Non-Endowed Purposes. Furthermore, the table below only provides major highlights of the milestones that must be met in order for the University Foundation to receive the disbursement. A fuller description of the payment contingencies are included in the Proposal under the section headed "PHASING & MILESTONES."

Installment	Installment Amount	Installment Date and Notes
Year 1 (2020)	Total: \$25,995,000.00 Endowed: \$15,000,000.00 Non-Endowed: \$10,995,000.00	On or about October 1, 2020 – Upon request from the University Foundation and the Walton Support Foundation's approval of Phase I annual report.
Year 2 (2021)	Total: \$44,955,000.00 Endowed: \$10,000,000.00 Non-Endowed: \$34,955,000.00	On or about October 1, 2021 – Upon the Walton Support Foundation's approval of report and meeting targets.
Year 3 (2022)	Total: \$71,955,000.00 Endowed: \$8,000,000.00 Non-Endowed: \$63,955,000.00	On or about October 1, 2022 – Upon the Walton Support Foundation's approval of report and meeting targets.
Year 4 (2023)	Total: \$22,905,000.00 Endowed: \$12,000,000.00 Non-Endowed: \$10,905,000.00	On or about October 1, 2023 – Upon the Walton Support Foundation's approval of report and meeting targets.
Year 5 (2024)	Total: \$28,905,000.00 Endowed: \$10,000,000.00 Non-Endowed:	On or about October 1, 2024 – Upon the Walton Support Foundation's approval of report and meeting targets.

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	\$18,905,000.00	
Total	\$194,715,000.00	
	Endowed: \$55,000,000.00	
	Non-Endowed: \$139,715,000.00	

The Walton Support Foundation in its discretion may decide to pay all or any part of the installment prior to the due dates indicated above.

3. **Contributions by University.** The University agrees to commit funding [(which may come, in whole or in part, from private gift support raised,] (independent of the support provided by the Walton Support Foundation hereunder) for the I³R as follows: at least \$2 million in faculty salary match, \$50 million towards the construction of the new research facility, and \$12 million for faculty startup matching funds and other funds allocations as described in Exhibit A.

4. **Endowment Administration.**

(a) Separate endowment. The University Foundation will maintain the Endowment as a separate endowment fund of the University Foundation and will separately account for the Endowment on the University Foundation's books and records. For administrative convenience, the University Foundation may combine any investments or property of the Endowment with other funds held by the University Foundation for investment purposes, provided that the identity of the Endowment will be preserved and accounted for on the University Foundation's books and records at all times.

(b) Investment objectives and policies. The University Foundation will invest the assets of the Endowment with the objectives and pursuant to the terms and conditions of the investment policy set forth in the attached Exhibit C, as may be updated from time to time by the governing board of the University Foundation. The University Foundation will promptly notify the Walton Support Foundation if any of the following events occurs: (i) a change in the terms of the investment policy; (ii) a failure to invest the Endowment assets within the asset allocation ranges specified in the investment policy; or (iii) a change in the identity, organizational structure or professional staffing of any investment advisor who manages Endowment assets.

(c) Investment reports: meetings with managers. The University Foundation will provide the Walton Support Foundation with quarterly investment reports, within 45 days after the end of each calendar quarter, for the Endowment. Such quarterly reports shall include: (i) a list of all transactions made during the quarter and a list of all assets held as of the close of the quarter; (ii) a statement of investment performance for the quarter and for the calendar year to date for each investment manager, for each class of investments (e.g., equities; fixed income) and for the total Endowment; (iii) a list of all distributions made from the Endowment during the quarter and for the year to date; and (iv) such other information as the Walton Support Foundation may reasonably request from time to time. The Walton Support Foundation's officers and agents will have the opportunity to meet at least semi-annually with the investment managers who manage Endowment assets.

All reports will be sent electronically to the Foundation according to instructions furnished to the University by the Walton Support Foundation from time to time for this purpose, referencing the Grant number for this project. [REDACTED] Please reference Grant [REDACTED]

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(d) Expenses chargeable to endowments. Subject to the following two sentences, neither the University Foundation nor the University will charge to or deduct from the Endowment any general management, administrative, accounting, overhead or other fees or expenses, whether incurred by the University Foundation or a party other than the University Foundation, without the Walton Support Foundation's prior consent, except as referenced in the Spending Policy noted in Exhibit C, Appendix A. In accordance with current practice previously approved by the University Foundation and the Walton Support Foundation, all investment expenses associated with the investment management of the comingled investment pool, including, but not limited, to, all custodial, investment consulting, external and internal investment management expenses and investment transactional fees, shall be charged directly to the investment pool so that all expenses are borne proportionally by each account invested in the pool. Notwithstanding the provisions for overhead as stated in the Investment Policy appendix, (i) the University Foundation may charge and deduct annually up to 10 basis points on the total Endowment value to cover overhead expenses but shall not charge to the Endowment any additional amounts for overhead expenses of any kind, and (ii) the University may apply annually from Endowment distributions it receives up to 10 basis points on the total Endowment value for University campus development overhead expenses but shall not receive from the Endowment any additional amounts for campus development overhead expenses (any additional amounts that would be applied to campus development overhead as indicated in the Investment Policy Appendix A will instead be applied to the I³R).

(e) Annual income distributions. There shall be distributed from the Endowment in each calendar year such amount as shall be determined by the University Foundation in its sole and absolute discretion, consistent with the general policies of the University Foundation and the University, and with the purposes of this Agreement. It is anticipated that the University Foundation will establish from time to time a distribution amount or distribution percentage for its endowed funds provided, however, without the prior written consent of the Walton Support Foundation, any distribution percentage so established shall not exceed 5%. With respect to any distribution percentage so established, it shall be based on a 36-month rolling average to the extent possible, although this period may be extended consistent with University Foundation policy as amended from time to time. For this purpose, such annual distribution may include up to 20 basis points in overhead expenses approved pursuant to paragraph (d) above and paid during the year (with up to 10 basis points paid to the University Foundation and up to 10 basis points paid to the University as indicated in paragraph (d) above). The University Foundation in its reasonable discretion, and subject to applicable University and University Foundation policies, may increase or decrease the distribution percentage and amount as it deems appropriate taking into account (i) the current needs of the University and the purposes and objectives of any subaccount and (ii) the maintenance of the purchasing power of the Endowment and any subaccount and the annual distributions therefrom taking into account inflation.

(f) Adjustments to endowment categories: distributions of principal. With the Walton Support Foundation's prior consent, the University may modify the Endowment categories of support, and may reallocate amounts maintained in one or more Endowment categories of support, if the University and Walton Support Foundation together determine that such modification or re-allocation will better further the purposes and objectives of the Endowment and this Agreement. With the Walton Support Foundation's prior consent, the University may also direct the University Foundation to make distributions in excess of the spending policy from the Endowment, although the University and Walton Support Foundation recognize that any such distributions should be reserved for extraordinary circumstances. In making any such decision, the parties shall take into account (i) the specific purpose or purposes for which such distribution would be made, (ii) the possibility that funds suggested for distribution might be raised from other sources, and (iii) the importance of maintaining the real value of each Endowment category over time taking inflation into account.

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(g) Naming Opportunities in Respect of Endowment. Subject to paragraph 7-A below, it is recognized that the University of Arkansas Board of Trustees shall have authority over all naming opportunities in respect of distributions of income or principal of the Endowment. However, any use of the family name "Walton" (including any part of a Walton family member's name that may reasonably be publicly identified as referring to such family member) at any time and for any reason in respect of income or principal of the Endowment shall require the written consent of the Walton Support Foundation and such consent may be revoked at any time with respect to any existing or future matter, undertaking or project. The University Foundation and the University shall enter into such agreements with such parties as shall be necessary to ensure that if the Walton Support Foundation shall at any time revoke its consent to any such use of the family name "Walton", (i) the University Foundation and the University shall have the right to require any party to cease using the name "Walton" in connection with the receipt of funds of the Endowment for general purposes or in respect of any particular undertaking(s) or project(s) which were funded in whole or in part with funds from the Endowment and (ii) such party shall be required to immediately cease to use such name if directed to do so by the University Foundation or the University.

(h) Endowment Distributions not Intended to Replace Public Funds. It is specifically intended that neither the Endowment nor the amounts distributable from the Endowment should replace any public funds that would otherwise be made available to the University. For this reason, and notwithstanding any other provision of this Agreement, no distribution shall thereafter be made from the Endowment for the I³R for any year or for any subsequent year if the Walton Support Foundation shall determine in its discretion that there shall have been a decrease in the percentage of the public funds available to the University that shall have been allocated to the I³R, other than for good, sufficient and justifiable reasons unrelated to the Endowment as determined by the Walton Support Foundation in its discretion. In making any such determination, the Walton Support Foundation shall consider the percentage of public funds available to the University that are allocated to the I³R for any year, which shall equal the total public funds made available to the University by the State of Arkansas (or any agency or subdivision thereof) and allocated for use by I³R divided by all such funds made available to the University for all of its programs and activities (including the I³R). Within 90 days after the end of each calendar year, the University shall furnish a calculation of the percentage of such public funds available to the University that are allocated for use by the I³R for the immediately preceding year and for the two years prior thereto.

(i) Procedures. The parties to this Agreement understand that the investment of the Endowment shall be managed by the University Foundation under the terms described herein, and that the disbursement of income is to be administered jointly by the Vice Chancellor for Economic Development and the Vice Chancellor for Research and Innovation, in collaboration with the Director of the I³R, and in accordance with applicable University procedures to fulfill the purposes of this Agreement.

5. Redistribution of Endowments to other Public Charities. (a) The Walton Support Foundation has selected the University, through the University Foundation, to receive the Grant because the Walton Support Foundation believes the University is the most appropriate and best qualified organization to operate the I³R as indicated in Exhibit A and the Proposal, and the University Foundation is the appropriate entity to hold and manage the Endowment and receive the other Grant funds on the University's behalf for the I³R. If, at any time after the fifth-year anniversary of the execution of this Agreement, the Walton Support Foundation determines in its discretion that the University or the University Foundation has failed to operate the I³R and/or manage or use the Endowment as intended by the Walton Support Foundation and as indicated by the occurrence of any one or more of the events in clauses (i) through (v) below, then, subject to the following subparagraph (b), the Walton Support Foundation may direct that all or any portion of the Endowment (including any income and appreciation resulting from investment of such property granted hereunder) will be transferred to one or more other universities or colleges operating in the State of Arkansas:

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- (i) the University Foundation is not using the Endowment (or any portion thereof) for the purposes provided by this Agreement or for such other purposes as approved by the Walton Support Foundation;
- (ii) the University is not using its best efforts to implement the strategic plan as described on pages 4 & 5 of Exhibit A;
- (iii) the University is not using its best efforts to align the University's productivity, expertise and reputation to be competitive with, and eventually position itself for potential selection as a member of, the Association of American Universities (AAU);
- (iv) the University Foundation departs in a material way from the investment policy set forth in Exhibit C to the detriment of the Endowment; or
- (v) except for any reasons outside the University's reasonable control, the University fails to make any contribution in a timely manner to support the I³R as provided in paragraph 3 above.

(b) If at any time the Walton Support Foundation determines that an event described in items (i), (ii), (iii), (iv) or (v) above has occurred, the Walton Support Foundation will notify the University and the University Foundation and will give the University and/or the University Foundation an opportunity to correct or adjust its performance to the Walton Support Foundation's satisfaction. If after a reasonable period (normally not to exceed 90 days to submit a detailed, formal plan of action to the Walton Support Foundation to address the issues identified, and 180 days to correct or adjust the University's performance pursuant to the plan) the University and/or the University Foundation has not corrected or adjusted its performance to the Walton Support Foundation's satisfaction, the Walton Support Foundation may direct the University Foundation to transfer the Endowment or any portion thereof to one or more other universities or colleges operating in the State of Arkansas as provided in subparagraph (a) above. The University Foundation shall promptly comply with any such direction and shall use its best efforts to complete such transfer as soon as practicable and in any event within 12 months of receiving notice of a transfer direction.

Prior to completing any such transfer, the University Foundation shall continue to make distributions to the University in order to (i) fulfill any public programming commitments, consistent with the purposes of the Agreement, scheduled to occur during a reasonable winding down period, (ii) enable an orderly transition period for addressing faculty and staff positions supported with endowment funds and (iii) enable any students receiving scholarship or similar funding from endowment funds to complete their respective degree program.

The Walton Support Foundation's ability to direct a transfer of all or part of the Endowment as provided above in this paragraph 5 shall expire on the thirtieth-year anniversary of the execution of this Agreement.

(c) In addition, if at any time (either before or after the fifth-year anniversary of this Agreement) a change to the public charity classification of the University Foundation or the University occurs, or if some other event occurs in connection with the terms and/or operation of this Agreement, that adversely impacts the status of the Walton Support Foundation as a "type 1" supporting organization described in section 509(a)(3) of the Internal Revenue Code and the Treasury Regulations thereunder, the parties hereto agree to take such actions as directed by the Walton Support Foundation, which may include without limitation the transfer of the Endowment and any unexpended Grant funds to one or more other universities or colleges

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operating in the State of Arkansas, as are necessary or appropriate to preserve the Walton Support Foundation's type 1 supporting organization status.

6. **Annual Reports.** The University will provide the Walton Support Foundation with an annual report within 90 days after the end of each fiscal year of the University on the University's and University Foundation's use of the Grant and the administration and use of the Endowment. Each such report will include a detailed account of the composition and performance of, and expenditures made from, the Endowment, and a detailed narrative of the University's progress in implementing the strategic plan as detailed in the Proposal. Such annual reports will also include such other information as the Walton Support Foundation may reasonably request from time to time. The University will continue to provide such reports each year as indicated below unless the Walton Support Foundation directs the University to discontinue such reports or the parties agree on another reporting process. The University's provision of annual reports pursuant to this paragraph 6 will not replace or affect the University Foundation's obligation to provide quarterly investment reports to the Walton Support Foundation as described in subparagraph 4(c).

Report Due Dates	Report Type and Notes
Annually, starting on September 30, 2021 Continuing through 2051 (30 years)	Annual Investment Reports (Endowed Funds) To be incorporated in the financial narrative reports provided to the Walton Support Foundation for all funds that have been granted to the University and the University Foundation by the Walton Support Foundation.
Starting on September 30, 2021 Continuing through September 30, 2025 (Final Report due date)	Annual Report (Non-Endowed Funds) To be incorporated in the financial narrative reports provided to the Walton Support Foundation for all funds that have been granted to the University and the University Foundation by the Walton Support Foundation.

All reports will be sent electronically to the Foundation according to instructions furnished to the University by the Walton Support Foundation from time to time for this purpose, referencing the Grant number for this project. [REDACTED] Please reference Grant [REDACTED] on all reports submitted.

7. **Oversight Committee.** The Walton Support Foundation's Board of Directors may in its discretion appoint an oversight committee ("Oversight Committee") consisting of at least two individuals to assist the Walton Support Foundation's Board and officers in reviewing the University and the University Foundation's actions under and in compliance with this Agreement. Members of the Oversight Committee, if appointed, shall serve for such terms, perform such functions, and shall act according to such procedures as determined by the Walton Support Foundation's Board from time to time.

7-A. **Naming Rights in Respect of Research Building, Endowed Positions and Bentonville Campus.** The Walton Support Foundation shall, in its discretion, have naming rights for the research building funded to house the I³R, its programs, endowed positions in the I³R and the U of A campus established in Bentonville (each a "Naming Opportunity") for as long as the Endowment or any part thereof is held and used and used by the University Foundation and/or the University, subject to the University of Arkansas Board of Trustees approval. The Walton Support Foundation may from time to time propose such names for any and all Naming Opportunities as it deems reasonable, provided that a name must be acceptable on a reasonable basis to the University. Any such names shall be used in all communications and printed materials by which the I³R publicizes itself and its positions and programs to the public, unless the Walton Support Foundation indicates otherwise. Any use of the family name "Walton" (including any part of a Walton family member's name that may reasonably be publicly identified as referring to such family member) at any time and for any

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reason in respect of any Naming Opportunity shall require the written consent of the Walton Support Foundation and such consent may be revoked at any time with respect to any such Naming Opportunity. The University and the University Foundation shall enter into such agreements with such parties as shall be necessary to ensure that if the Walton Support Foundation shall at any time revoke its consent to any such use of the family name "Walton", (i) the University Foundation and the University shall have the right to require any party to cease using the name "Walton" in connection with any such Naming Opportunity and (ii) such party shall be required to immediately cease to use such

8. **Records.** The University Foundation will maintain records of receipts and expenditures made in connection with the contributed property hereunder and will keep these records for a period consistent with generally accepted accounting principles. The University Foundation will make its books and records in connection with the contributed property, and the University Foundation's operations and finances, available for inspection by the Walton Support Foundation's representatives during normal business hours as the Walton Support Foundation may reasonably request.

9. **Walton Support Foundation Standing; Donor's Role.** (a) The parties agree that the Walton Support Foundation has standing to receive reports, perform actions and exercise rights as provided by this Agreement and to raise any appropriate issues or claims related thereto.

(b) Without limiting the foregoing, it is neither the intent nor the desire of the Walton Support Foundation to actively manage any of the ongoing affairs, operations, investments or academic programs of the University and the University Foundation and none of the provisions of this Agreement should be interpreted as a desire to do so. The Walton Support Foundation is aware of the need to maintain the collegiality and decision-making processes of the governing boards of the University and the University Foundation.

10. **Enforceability; Successors and Assigns.** The terms of this Agreement shall be legally binding upon and enforceable against each of the parties hereto and their respective successors and permitted assigns. Neither this Agreement nor any duty or right hereunder may be voluntarily assigned by a party without the consent of the other parties.

11. **Tax Classification.** The University Foundation represents to the Walton Support Foundation that the University Foundation is classified by the Internal Revenue Service as an organization described in sections 501(c)(3), 509(a)(1) and 170(b)(1)(A)(iv) of the Internal Revenue Code. The University represents to the Walton Support Foundation that the University is classified by the Internal Revenue Service as an organization described in sections 509(a)(1) and 170(c)(1) of the Internal Revenue Code. Each of the University Foundation and the University will promptly notify the Walton Support Foundation of any change in these tax classifications.

12. **Notices.** All directions, consents and other notices given by a party pursuant to this Agreement will be in writing and delivered personally or sent on a prepaid basis by certified or registered mail (return receipt requested), receipted courier service, or facsimile, to each other party as provided in this paragraph. Any such notice, when delivered or sent in the manner aforesaid, will be deemed given on the date of receipt. Each of the University, the University Foundation and the Walton Support Foundation will designate a representative to receive notices as provided herein.

13. **Authority to Enter into Agreement.** By execution of this Agreement, each of the parties hereto represents to each other party that (a) the terms hereof do not violate any obligation by which such party is bound, whether arising by contract, operation of law or otherwise, and (b) this Agreement has been duly authorized by appropriate action and when so executed and delivered will be binding upon

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such party, in accordance with its terms.

14. **Governing Law.** This Agreement is governed by and will be construed in accordance with the laws of the State of Arkansas, including but not limited to the Arkansas Uniform Prudent Management of Institutional Funds Act.

15. **Entire Agreement; Further Documents.** This Agreement (including its Appendices) represents the entire agreement of the parties with respect to its subject matter, and supersedes all prior negotiations, discussion and prior agreements. The parties agree that each will execute and deliver such other and further documents as are contemplated by this Agreement or are reasonably required in order to effectively carry out the purposes of this Agreement.

16. **Amendment.** The terms of this Agreement may be amended by written instrument executed by the Walton Support Foundation, the University Foundation and the University.

17. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which will be deemed an original and which, taken together, will constitute one and the same agreement. Any signature delivered by facsimile, email attachment, or other electronic means shall be deemed an original signature to this Agreement.

18. **Gratuities.** The Foundation desires that the University and University Foundation's resources be dedicated to accomplishing its philanthropic purposes; therefore, the University and University Foundation agree that neither will furnish the Walton Support Foundation or its Board of Directors, officers, staff or affiliates with any type of benefit related to this Grant including tickets, tables, memberships, commemorative items, recognition items or any other benefit or gratuity of any kind.

19. **Publicity and Communications.**

(i) Grant Publicity and Contact. Grant publicity related to this Grant consistent with the University and University Foundation's normal practice is permitted, subject to the following provisions: The Walton Support Foundation expects any announcements and other publicity to focus on the University and University Foundation's work and the project or issue funded by the Grant. Recognition of the Walton Support Foundation's role in funding the project is permitted, provided that the timing, content and strategic focus of such publicity should be approved by the publicity contact listed below. Publicizing the Grant and the Walton Support Foundation in the University or University Foundation's publications and communications in a manner consistent with similar grants obtained by the University or University Foundation is permitted. If publicized or recognized, please coordinate communications about this Grant with your publicity point of contact prior to any announcements.

The Walton Support Foundation may ask the University or University Foundation to provide illustrations, photographs, videos, recordings, information or other materials related to the Grant (collectively "Grant Work Product") for use in communications including the Walton Support Foundation's website, annual report, newsletters, board materials, presentations, communications and other publications. The University and University Foundation agree to provide the Walton Support Foundation with such items upon the reasonable request and hereby grants to the Walton Support Foundation and anyone acting under their authority a fully paid-up, world-wide, right and license to use, reproduce, display and distribute the Grant Work Product in connection with the Walton Support Foundation's charitable operations and activities. In connection therewith, the University or University Foundation shall be responsible for obtaining all necessary rights and permissions from third parties for the Walton Support Foundation to use the Grant Work Product for these purposes. By signing this Agreement, the University and University Foundation also acknowledge and agree

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to use by the Walton Support Foundation of historical, programmatic and other information relating to the University and University Foundation and the Grant hereunder.

For all publicity communications regarding this Grant, your point of contact at the Walton Support Foundation will be Daphne Moore, Communications Director. Communications will reference the Grant number for this project. Daphne can be contacted via phone (479) 464-1578 or email dmoore@wffmail.com. Please reference Grant [REDACTED] in your communication.

Grant Contact. For all Grant-related communications regarding this grant, your point of contact at the Foundation will be Naccaman G. Williams, Director of Special Projects. Dr. Williams can be contacted via phone (479) 464-1582 or email nwilliams@wffmail.com. Please reference Grant [REDACTED] in your communication.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives effective as of the date first above written.

By electronically signing these items the University and the University Foundation acknowledge and agree to the terms and conditions herein. A copy of the completed document will be emailed to the Grantee through DocuSign. If the electronic signing of this letter is not completed by July 30, 2020, the Walton Support Foundation will consider the University Foundation to have declined the Grant.

The Walton Family Charitable Support Foundation, Inc.

By: _____
Kaneaster Hodges
President

The University of Arkansas Foundation, Inc.

DocuSigned by: [REDACTED] 7/9/2020 | 8:52:21 PM CDT
By: [REDACTED]
Ma [REDACTED]
Vice Chancellor for University Advancement

Board of Trustees of the University of Arkansas

Acting for and on behalf of the University of Arkansas, Fayetteville

DocuSigned by: [REDACTED] 7/9/2020 | 7:25:56 PM CDT
By: [REDACTED]
Don [REDACTED]
President, University of Arkansas System

DocuSigned by: [REDACTED] 7/10/2020 | 4:40:35 AM CDT
By: [REDACTED]
Joseph [REDACTED]
Chancellor

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Exhibit A
University of Arkansas Proposal

Phase II of Research and Commercialization: The Institute for Integrative and Innovative Research (I³R) & Entrepreneurial Education

Transforming discovery.

June 6, 2020

Executive Summary

The Phase I Research and Commercialization grant from the Walton Family Charitable Support Foundation has enabled the university to build our strategy and capacity in technology transfer, research and sponsored programs, and signature faculty hires. We have also made great strides in invention disclosures and patent productivity, offering funding for research with high potential for commercialization, a gap fund for emerging startups, and professional development and supports for would-be entrepreneurs both on and off-campus.

The Phase I grant was also instrumental in building the infrastructure to support the Technology Ventures Office, the Office of Economic Development, and the Office of Research and Innovation. These investments have also had a secondary positive outcome that will help accelerate our goals. Already we're hearing that the culture of innovation on campus has changed significantly.

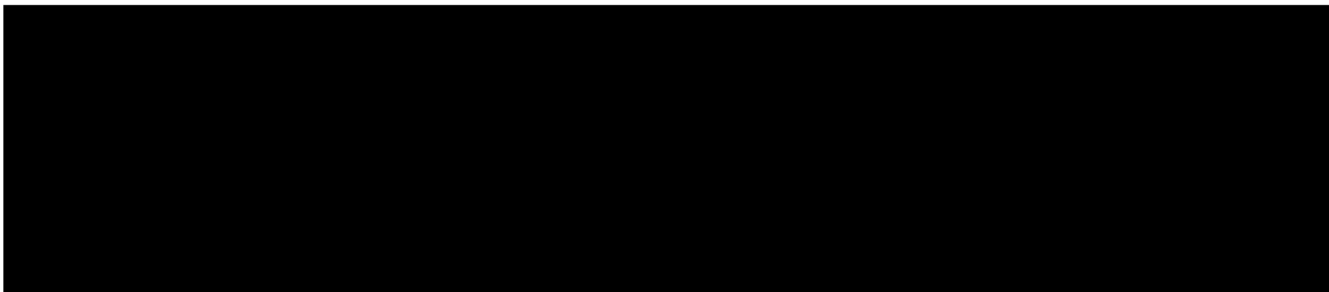
Phase I accomplishments are significant and include:

- Patent productivity reaching an all-time high of 130
- Significant staffing up in Technology Ventures and research grant development specialists
- Brought on "corporate concierge" to connect industry to campus R&D capabilities
- \$180.2 million in total R&D expenditures; \$5.1 million in industry-sponsored research expenditures
- 14 research projects with high commercialization potential funded
- 15 teams participated in regional NSF Innovation-Corps and 2 teams participated in national I-Corps experiential education to help researchers gain valuable insight into entrepreneurship, starting a business
- \$105,000 in gap funding was awarded to four teams
- Launched a Startup Village, providing supports and services to startups
- Three startup companies licensed U of A technologies; two were faculty led
- Eliminated barriers to industry research connectivity by changing policies across the U of A System allowing industry to keep IP generated at the U of A
- Laid the infrastructure that enabled the university and Northwest Arkansas Council to launch the Small Business Emergency Assistance program in eight days in March 2020, from concept to first customer following the COVID-19 pandemic

To build on the Phase I grant, the Chancellor appointed four faculty fellows to strengthen campus-wide processes to identify the university's research strengths. The areas of data science, materials science, food systems, and metabolic diseases, were identified in this process and were selected because of their alignment with the IC² report and then when combined, create a distinguishing advantage for the U of A when combined with integrative neuroscience, a fifth area previously in development was integrated into

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this vision. Through the outstanding work of U of A faculty, five potential Innovation Clusters/Centers of Excellence have been identified that will strategically build a critical mass of researchers in areas where we have strength and have secured funding—and vast potential to accelerate our research engine.



The groundwork laid in Phase I, and the essence of Phase II, is the critical importance of the University of Arkansas's success at attracting greater levels of federal research funding. This is also the key to realizing greater commercialization outcomes. Attracting greater levels of research funding, requires our ability to grow our research capacity through the addition of research faculty and star scientists and scholars – plus the addition of much-needed research space, as well as an exciting and distinguishing approach to doing research in new ways through a beyond interdisciplinary research institute.



They are summarized here and described in greater detail later in the document:

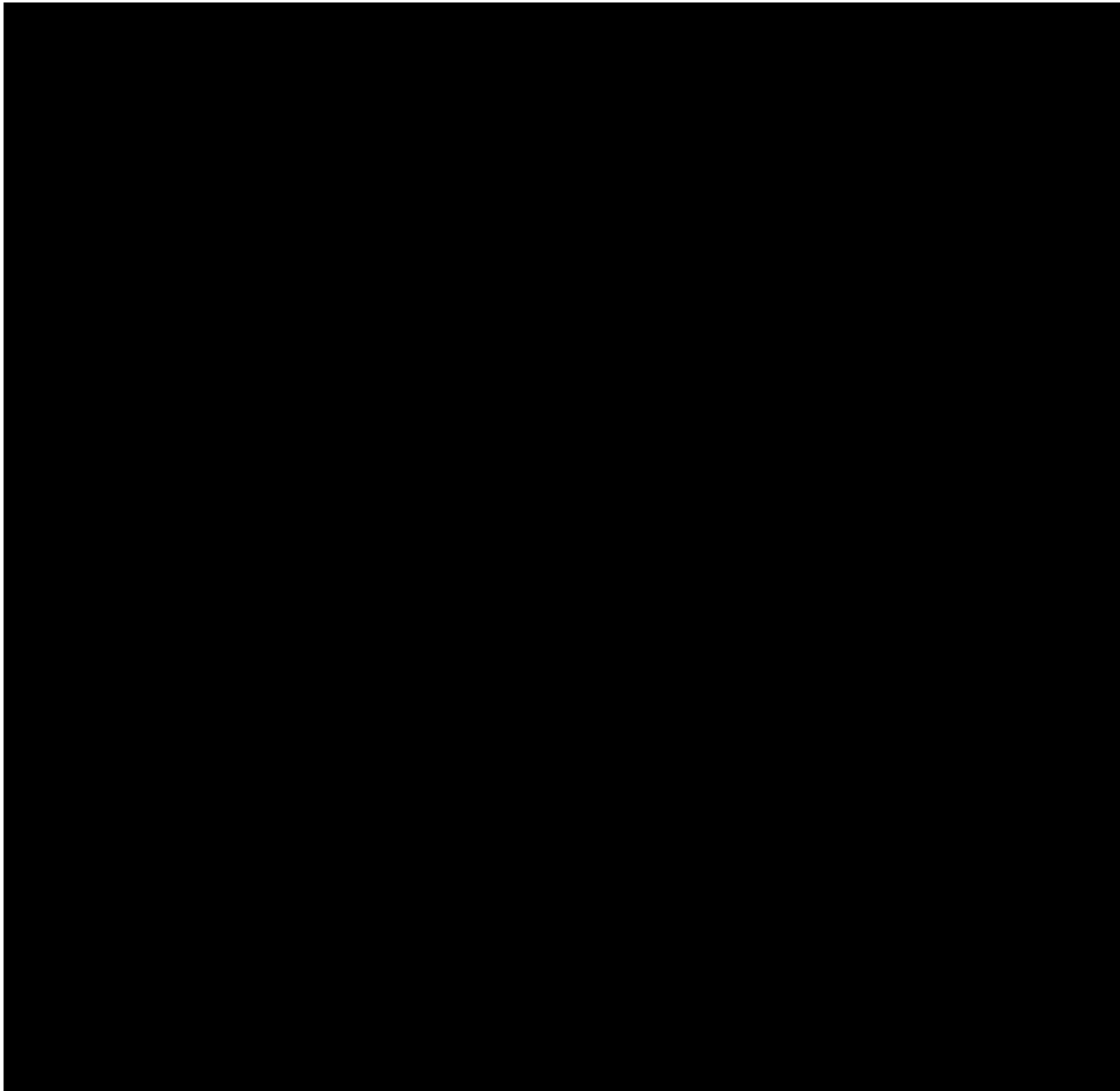
1. Create a distinctive research institute to drive discovery – The **Institute for Integrative and Innovative Research (I³R)** is the chancellor's vision to help distinguish the UA.
 - a. Establish distinguishing Innovation Clusters within the Institute comprising the following research focus areas:
 - i. Food Systems – Northwest Arkansas can be an epicenter of research excellence in food systems and the future of food.
 - ii. Data Science – the U of A will advance the state-of-the-art in data science and to help transform Arkansas' economy through the application of data science.
 - iii. Materials Science – Discovers and produces reliable and economically viable materials that affect our everyday lives from clothing that protects our skin from harmful sun rays to cell phones that change the ways we work and live to cars and aircraft that are safer and environmentally-efficient.
 - iv. Metabolic diseases – the U of A can become a premier model for improving the lives of individuals impacted by metabolic dysfunction, their families and the community; through its commitment to excellence in comprehensive interdisciplinary research, commercialization, education and industry and community engagement
 - v. Neuroscience – the development of this area has been underway for the past two years and, when combined with the other four clusters, presents a distinguishing opportunity to attract significant levels of National Institutes of Health research dollars among other sources. Our main strengths in neuroscience lie in imaging and computational approaches, which complement the other areas.

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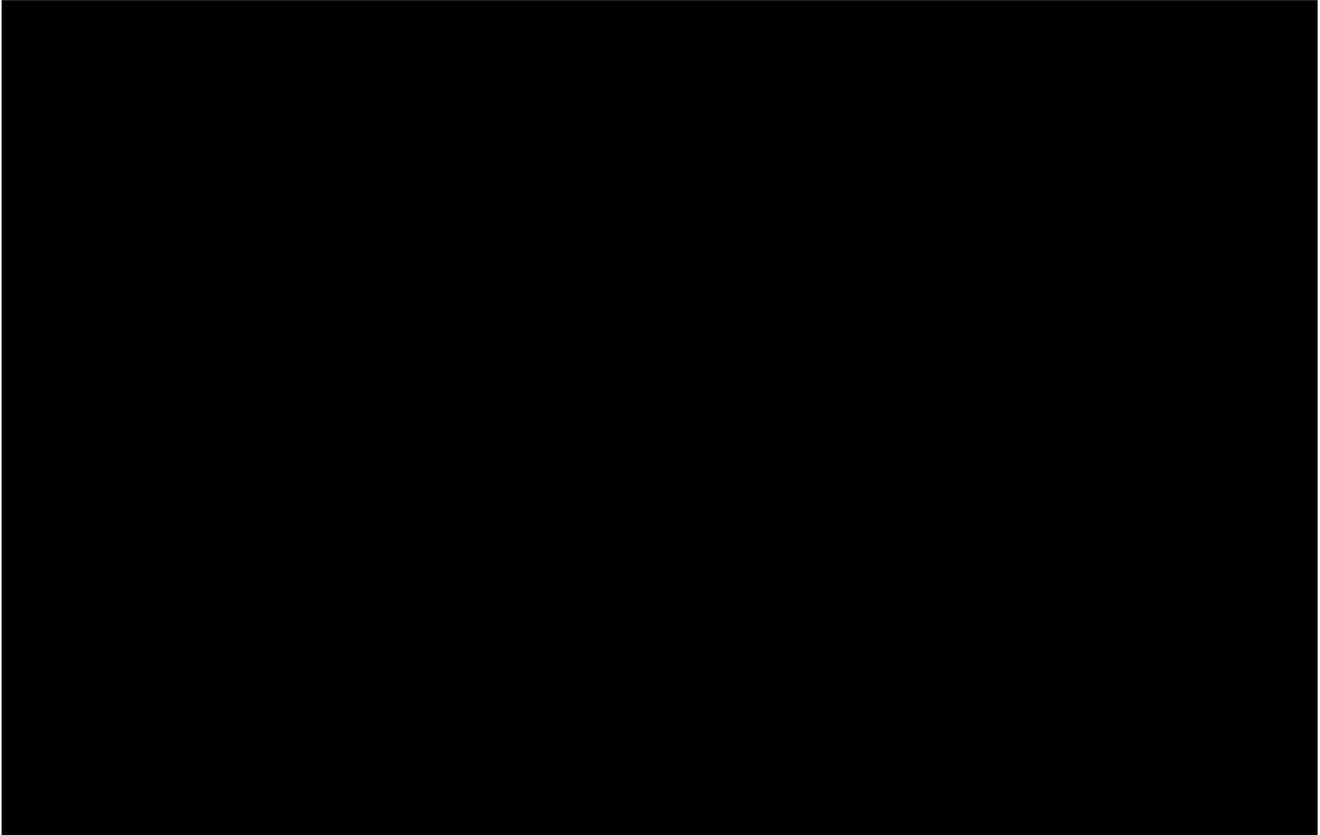
- b. Leverage Phase I resources for “star scientist” faculty hires in our signature research areas, defined as a leaders in their field, and those with demonstrated experience in bringing intellectual property to the marketplace through licensure or as part of a founding team, to strategically build up a particular research area as key members of the Institute. They will join a number of high-performing star faculty who are already at the U of A as part of the I³R Institute.
 - c. Increased emphasis on hiring “non-traditional” research scientists. There will be potential opportunities for joint appointments with doctorate-degree holding industry experts.
2. **Build a research building**—which will house I³R, add much-needed space, and act as an interactive and integrated hub for the innovation clusters, driving innovation on the edges between clusters.
 - a. A 75,000-100,000 sq. ft. facility will provide space for approximately 50-80 faculty researchers. It will house the “hubs” of Innovation Clusters across multiple disciplines and will include space designed for innovation, prototyping, and collaborating with industry.
 - b. Core research facilities for use by U of A scientists as well as industry scientists outside the U of A will be housed in the building.
3. Create an **environment where entrepreneurship and commercialization** thrive – inside the institute, across campus and throughout the community through programming, incentives and culture shifting.
4. Open a U of A location in **Bentonville** to expand the University’s regional presence. Campus would be phased in terms of an establishment phase followed by a growth/expansion phase and feature:
 - a. Global Campus operations, which administers training, certificate and distance learning programs.
 - b. Executive education and other workforce training and upskilling programs.
 - c. Studios for entrepreneurship, commercialization, and startup advice, resources and mentoring.
 - d. Extension service site for School of Art; the I³R institute; K-12 education
 - e. Center for Northwest Arkansas outreach – connectivity hub for liaisons to campus/navigators to help industry find inroads for industry to programs, services, etc.
 - f. Diversity and inclusion research and training through IDEALS (Inclusion, Diversity, Equity, Access, Leadership and Strategic Supports) Institute.
 - g. Meeting and partnership development space among much more.
 - h. We will engage regional interests and companies in a needs assessment and plan for future growth/expansion as part of this.
5. **Solidifying industry partnerships** through a more strategic approach that includes the following seven items:
 - a. Consulting relationships. Recent U of A system-wide changes make our faculty more accessible to industry by reducing uncertainty. Now, faculty can engage in private contractual relationships with industry, provided they disclose their work so that conflicts of interest and conflicts of commitment can be managed. This is a big shift in policy at the U of A.
 - b. Capstone projects. Currently common in Engineering and the Walton College, problems posed by industry partners are tackled within the context of graduate/honors seminars under the supervision of faculty members and industry employees.
 - c. Idea labs. Short-term projects posed by industry partners on short-term contracts to university faculty or university labs.
 - d. Industry-sponsored research agreements to incentivize industry support by providing matches on the fee for services.

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- e. Long term arrangement with industry (sometimes more than one company) where university and industry research together solutions to the big challenges faced in a given industry.
- f. Back-end IP partnerships. Where university IP is licensed to a company and the company/professor work together in collaborative workspaces to move the project to market. I³R and other appropriate spaces within the ecosystem.
- g. Scientist/executive in residence. This is contemplated in I³R and embedded in the colleges to increase industry presence and lead to more collaboration.
- h. Leveraging the connections of the Northwest Arkansas Council to make the case to use the U of A for industry research.



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The University of Arkansas respectfully asks for funding in the amount of \$194,715,000 million to support the following initiatives articulated to accomplish the vision.

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**THE INVESTMENT
INSTITUTE & ENTREPRENEURIAL EDUCATION INVESTMENT | FACULTY ENDOWMENTS**

Vision: A unique approach to research that will distinguish the University of Arkansas by creating a flexible, state-of-the-art collaborative framework designed to facilitate the integration of research across overlapping edges of disciplines. This will help drive discovery, innovation and the distinctiveness of the University of Arkansas. The Institute for Integrative and Innovative Research (I³R) is a framework for how this research approach is unique.

The I³R will be a university-wide presence, not owned or administered by existing academic units, and the Institute Director will have a dual report-line to the Vice Chancellor for Research & Innovation (VCRI) and the Vice Chancellor for Economic Development (VCED).

I³R Endowed Director's Chair

\$15,000,000

I³R executive director endowment (faculty): To attract and retain a high caliber executive director who would have an appointment on the faculty, an endowed director's chair will help support the position in perpetuity. The director reports dually to the VCED and the VCRI. The endowment would provide \$600,000 annually to supplement salary and provide support for executive director. We expect this person to have an excellent track record in securing federal grants, experience in working with private industry and business as well as the ability to plan for and execute the vision laid out for the Institute.

We envision the U of A providing up to \$200,000 for the director's salary, to be matched by \$200,000 from the endowment. We anticipate the right candidate will have a strong track record of successful collaboration, bring integrative and convergent research grants along with him or her, which may augment their salary further. The additional \$400,000 is for support not figured elsewhere and designed to attract a stellar candidate who will view the support as more valuable than the salary for the ability it will provide him or her to do strategic work such as provide seed grants to faculty or provide incentives to industry.

Centers of Excellence Directors Faculty Endowment

\$10,000,000

Centers of Excellence Directors (faculty fund): This fund will support the hire of five (5) Centers of Excellence/Innovation Clusters directors. The Director of the I³R will hire the Centers of Excellence/Innovation Clusters directors in partnership with the colleges. This endowment will be an attractive component to recruit and retain a director for the research institute and fund a portion of the salary of the directors, with a portion of the salary funded by the home college. The assumption here is that the university would provide between \$60,000-100,000 base pay for these faculty, which would be supplemented by an additional \$100,000 from the endowment (assuming an annual return on earnings of \$500,000, divided by five).

I³R Faculty Endowment

\$30,000,000

The I³R Faculty Endowment will provide matching funds to hire up to 15 faculty (in addition to the five previously hired center directors) who will hold appointments in the Institute as well as in a home college or school. The I³R Director will hire faculty over a four-year incremental period concluding in year five,

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when the building opens. We expect these faculty to have established research programs and a history of external support.

Given the Institute structure will maximize integration across key disciplines, independent of departmental or center structures, it will attract high-caliber faculty and students from other institutions who are productive in this kind of research environment.

INSTITUTE INVESTMENT | NON-ENDOWED

[REDACTED]

We have [REDACTED] identified three additional Innovation Clusters creating a total of five. These five Innovation Clusters are designed to bring our researchers, visiting faculty, and industry experts together to collaborate, conduct cutting edge research, access state-of-the-art technology and equipment and compete for funding from government agencies, national foundations, industry partners, and other external funding sources. Integration of research across these five will ultimately enhance our national reputation.

- Data science
- Food + technology: Food systems and the future of food
- Materials science & engineering
- Bioscience & bioengineering research in metabolism
- Integrative systems neuroscience

Startup for Center of Excellence Directors

\$5,000,000

Startup for Centers of Excellence to fund strategic needs and attract center directors who are considered "star" scientists.

I³R Faculty Startup (Year 3-5)

\$15,000,000

Startup funds for faculty hired to the Institute, matched by U of A funds. Provides an appeal to faculty recruitment as well as valuable incentive and funding to establish or move research programs to UA.

I³R Staffing Fund (Year 3-5)

\$6,000,000

Specialized staff will be needed to support the institute, run the physical building, maintain and schedule the labs and equipment use, as well as support the faculty housed in the building. This fund will be used to hire these staff in years three through five of the grant. These staff will be sustained by indirect-cost recovery as federal research funding increases.

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IR Maintenance & Strategic Supports Fund (Year 3-5)

\$6,000,000

These funds will be used to offset operational costs of the Centers of Excellence, the Institute and the building. It will also provide funding to organize and host seminars, national/international conferences and convenings of researchers and scientists, and other strategic supports for Institute members.

Entrepreneurship Education Fund

\$3,285,000

Best known for its record of developing student-led ventures, the Office of Entrepreneurship and Innovation emphasizes experimentation, agility, and experiential learning for students from all disciplines, at all stages of their experience. OEI's trusted position within the university and region allows it to lead and support initiatives across campus. Below we prioritize initiatives that have the most immediate impact toward OEI's long-term vision. These initiatives have been tested through pilots and will have immediate impact toward two goals: 1.) forming interdisciplinary student teams connected to real problems and industry partners; 2.) supporting the success of student entrepreneurs and their ventures. All estimates are for five years of funding.

Heartland Challenge: Arkansas' first global student startup competition launched in 2020 and recruited world-class judges and 100+ teams. A recruiting mechanism for talent and a marker of U of A's distinction in entrepreneurship among peer institutions, the Heartland Challenge is an investment in the future:
\$900,000

Graduate Student Entrepreneurial Fellowships: A graduate fellowship program would provide stipends for up to 12 graduate students per year to extend their programs to pursue the Graduate Certificate in Entrepreneurship or other entrepreneurial training. **\$1,950,000**

Venture Internships: The Venture Intern Program serves undergraduate across all disciplines, who are placed with startups and entrepreneurship support organizations to develop the entrepreneurial student community at the U of A and across the region. Fund would reduce administrative burden on startups by providing 50% of the assistant director of student programs and the materials and scholarships for co-op credit. Program manager and materials: **\$435,000**

The Honors College Futures Hub Internship Fund

\$250,000

We live in one of the nation's most rapidly growing and economically diversifying metropolitan areas. Presently, there are too few on-ramps to integrate U of A students into this dynamic environment. Expanded access and education and support to make internships effective is critical for both the region and for our students' future success. Coursework and traditional research are only two parts of what make a student successful. Hands-on experience fills the gaps in practical understanding that cannot be filled by a textbook and exposes the student to potential product improvements and research questions they will not discover any other way. Currently, endowments from the Walton Family Charitable Support Foundation provide a limited number of international research and internship opportunities. Funding for domestic internships will complement these endowments by filling a critical gap in applied learning. Funds will support student expenses not covered by the internship allowing students to access opportunities in many areas of the country.

Connector-Liaisons & Support

\$1,140,000 two positions over five years

\$40,000 database

A significant challenge faced by companies of all sizes is knowing how to connect into the University of

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Arkansas – and particularly our students. The organization is large and complex, and not always intuitive to an outsider. The desired end-state for the U of A is a fully coordinated and interconnected campus that aligns faculty, staff and students with business and industry through internships, placement, while also understanding the needs of employers for graduates. With so many entry points, the University desires a stronger entry portal and collector, but one that is proactive in its outreach and engagement. Phase I funded a “corporate concierge,” specific to the research enterprise and securing industry-sponsored research. Phase II will expand the focus toward a student/human capital orientation.

Toward that end, we propose to add two liaisons who serve the entire university and can provide information on services and opportunities at the university, communicate private sector wants and needs to relevant parties inside the university, and help the private sector connect with faculty and staff expertise within the university. This should increase the number of mutually beneficial partnerships we develop with the private sector in Bentonville, Fayetteville, and throughout the state and region. Initially, one liaison would be placed each in Bentonville and Central Arkansas, and will play a key role in making sure that our private sector partners know more about the high quality graduates we produce while assisting businesses and industries in finding the talent they need from our pool of very talented graduates. The liaisons would report to Economic Development, and host a quarterly meeting with Career Services, Corporate and Foundation Relations, Industry Engagement and the Directors of Employer Relations embedded in the colleges to share information and strategy. One-time funds for a database to support and harness the effort.

BUILDING INVESTMENT | NON-ENDOWED

Research Building Construction

\$50,000,000

Vision: A uniquely operated research facility that will distinguish the University of Arkansas among research universities by creating a flexible, state-of-the-art collaborative space designed to facilitate the integration of research across overlapping edges of disciplines to drive discovery and innovation. I³R main office will be housed within the building.

To match the university’s investment in a 75,000- to 100,000-square foot research building. The building will be designed to influence and inspire collaborative research and discovery. It will be welcoming and provide access to services to aid in commercialization, foster industry engagement. It will house a specific number of laboratories key core facilities/ equipment for use by multiple academic researchers as well as industry partners. The building will offer space for industry incubation while research projects leading to commercialization are underway. Ceremonial groundbreaking is anticipated in fall 2020 with a building open date of fall 2023.

Core Equipment Purchase | Support for Building and I³R

\$30,000,000

I³R is a hub and spoke model, the building will require select core equipment, which will complement the addition of other equipment necessary to advance our research enterprise but may be located elsewhere on campus. The equipment purchased will be used by U of A faculty, and managed in such a way that industry partners will be able to access to the equipment as well. (Recent changes in U of A System IP policies make this possible and more desirable to industry than ever before by removing claims to research generated this way.)

Faculty Moves to I³R

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\$9,000,000

Upon completion of the building, this fund supports the costs of the 45 additional people who will be relocating into the research building. This will cover additional buildouts to accommodate specific equipment, or the actual movement and delivery of equipment, which may require dismantling, re-assembly, calibration, and other special handling. [REDACTED]

BENTONVILLE INVESTMENT

Bentonville Campus Launch |The Collaborative

\$10,000,000

Phase A – [REDACTED]

[REDACTED] it will support the costs to lease a facility in Bentonville, buildouts or renovation costs, startup, outfitting, furnishings, technology, networking and equipment in the facility. [REDACTED]

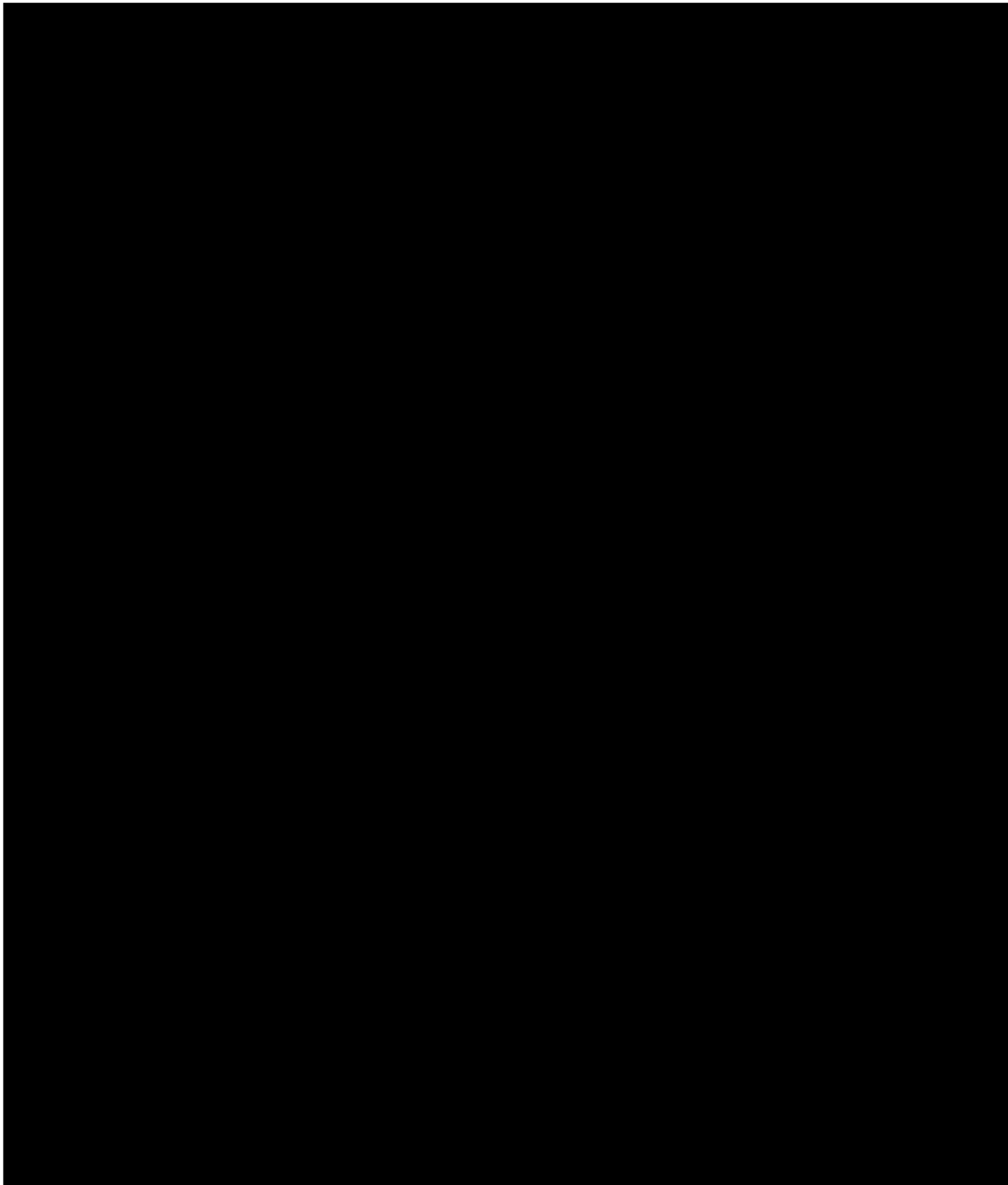
[REDACTED]

Bentonville Campus |The Collaborative | Annual Operational Support Fund

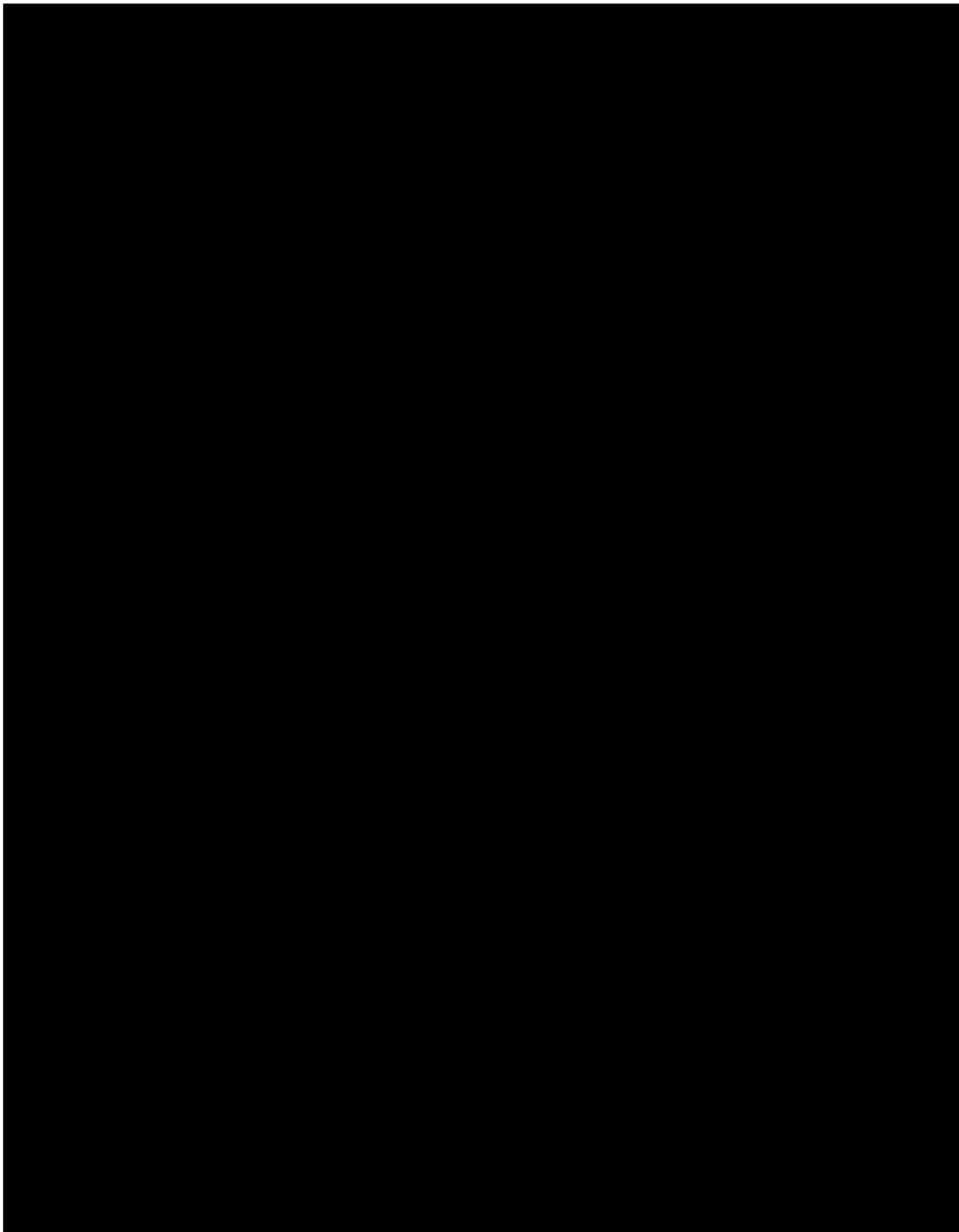
\$4,000,000

For the following four years after the startup phase, this fund will support the annual operations, lease fees and other costs until revenue generation. [REDACTED]

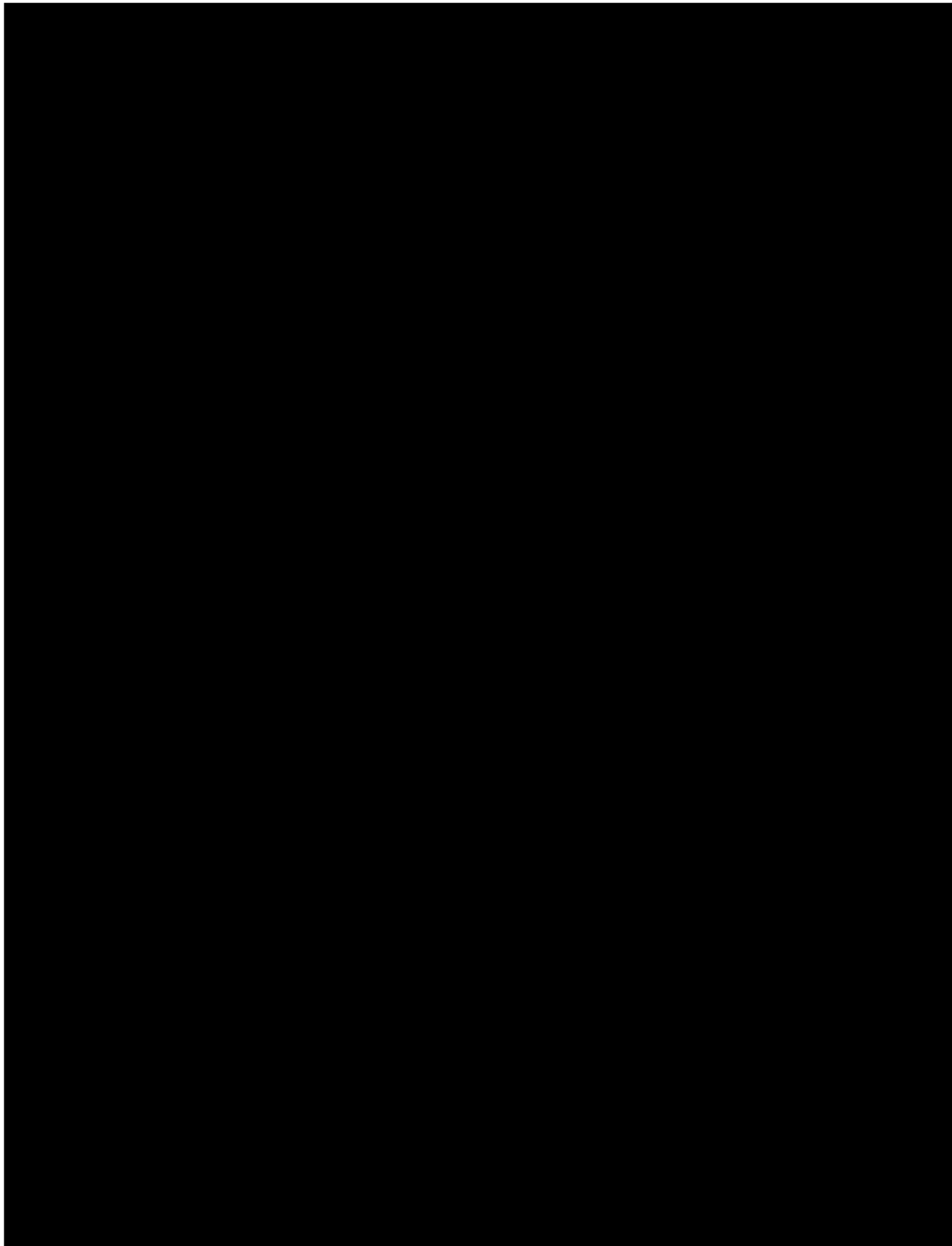
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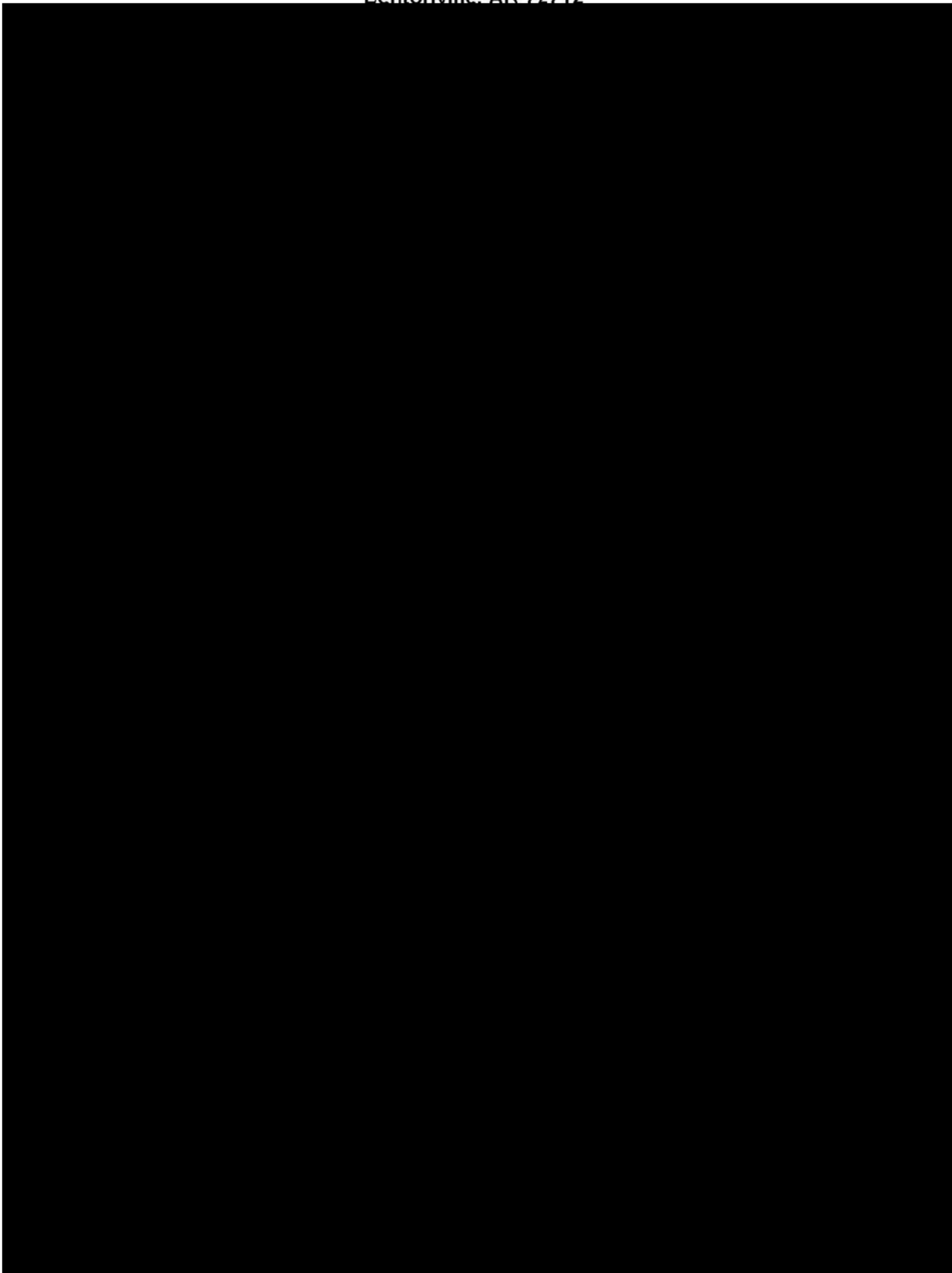
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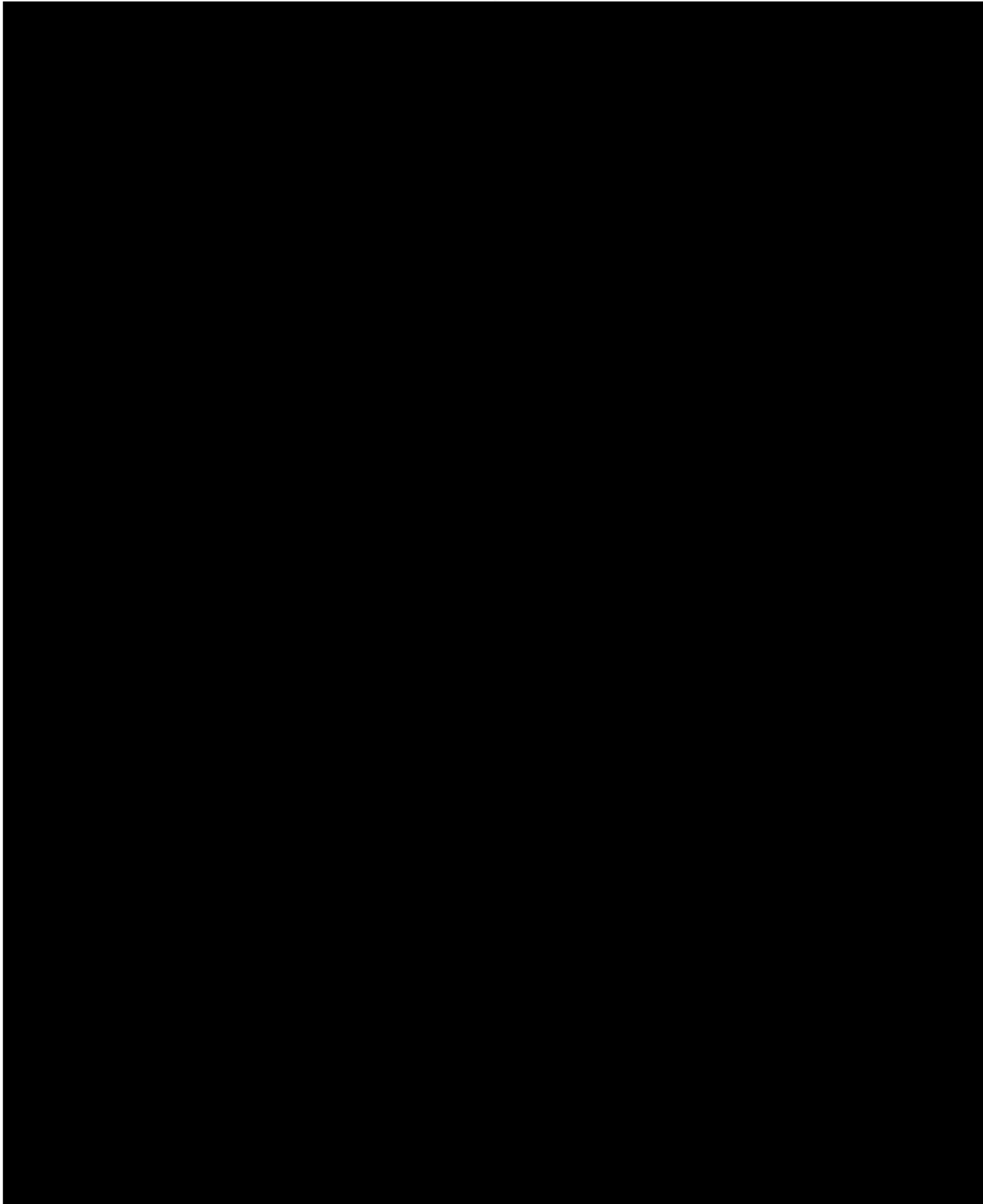
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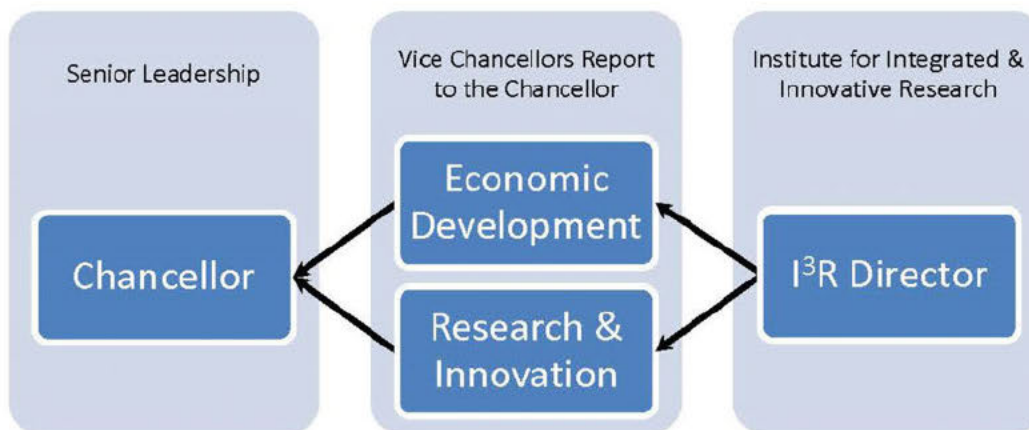
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REPORTING & ACCOUNTABILITY

For maximum productivity and outcome attainment, it's essential that these areas intertwine and are working in concert to achieve institutional goals and objectives. The reporting structure follows.



University of Arkansas Organization: There is an office of economic development and an office of research and innovation, two distinct offices, each led by a vice chancellor who report directly to the chancellor. Among the units, there is much coordination, dotted-line relationships, shared reporting, and collaboration that an organizational chart does not adequately capture.

- Vice chancellor for economic development is *outward facing* developing relationships and connections to the private sector, industry, etc., and connecting them inward to expertise. VCED provides leadership to connect faculty work to external sources, matching IP to companies, and research to IP, finding mentors for emerging companies, and connecting economic development activities. VCED is responsible for the overall economic development and commercialization outcomes of the campus including the success of commercialization in I³R.
- Vice chancellor for research and innovation is *inward facing* in the development and expansion of our research enterprise. The VCRI provides leadership in resource development (notably in federal funding) to fund pure and applied research, and provides the incentives, support and compliance oversight needed by scientists. A small number of research discovery will lead to commercialization. VCRI is responsible for the overall research outcomes of the campus; including the success of the I³R
- The Institute's director is accountable for the outcomes associated with the institute activity; they are expected to help propel the outcomes of research and be accountable for transforming the research culture on campus to be more integrated and more commercially focused. While the institute is more closely aligned to the research mission of the University of Arkansas, the director and the institute are accountable to both the VCRI and VCED and the director reports dually to the both as well. (We have many successful examples of dual reports on campus including the Office of Innovation and Industry Partnerships, which also reports dually to VCRI and VCED.)

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- Until 2017, the VCRI & VCED were one position, however Chancellor Steinmetz separated these two positions to better amplify each of these areas of focus and to create better alignment of resources to mission. These two report now directly report to the chancellor.

PROPOSAL DETAILS

I³R – The Institute for Integrated & Innovative Research

A new research building will become the hub and focal point of integrated activity with strategic outward “spokes” on campus such as our major research facilities, that will still house important disciplinary work in the clusters, and throughout the communities we serve. Faculty, students and staff who are part of the Institute will have appointments in both the centrally managed Institute as well as in traditional colleges and schools.

Our goal is to go beyond disciplinary, collaborative, interdisciplinary research to the next level, which we call integrative research. Integrative research is defined as a culture and environment that encourages researchers to combine ideas, engage in creative thinking, and develop methodologies or approaches, across university administrative structures, to tackle research problems. Integrated research is at the intersection of traditional fields on their “cutting-edges” that lead to truly innovative discoveries, new directions and at times new fields.

Our traditional university structure has been built around disciplines, usually housed in departments within schools and colleges. Like most universities, we have also developed cross-cutting structures (e.g., research centers) to support collaborative research within disciplines as well as interdisciplinary research. These cross-cutting structures have helped drive the substantial growth of research at the University of Arkansas.

The I³R will be the framework for amplifying both the regional roadmap for entrepreneurship while also advancing the university’s research engine. It will enable us to build on the strengths of the campus and the region by forming the umbrella organization over the Innovation Clusters.

The I³R will also further enhance our ability to facilitate an increase of the productivity of existing faculty by providing research infrastructure, and creating an environment that encourages collaboration around cross-cutting research themes.

The I³R framework will help build critical mass of researchers in areas where we have strength, funding, and potential for commercialization. Through this approach, the faculty fellows led the development of detailed plans to move the innovation clusters of Data Science, Food System, Materials Sciences and Metabolic Disease to the next level. The existing neuroscience faculty also developed a plan to create a strong and focused integrative neuroscience cluster on campus. The I³R framework is designed to bring researchers together across campus around the cutting edges of these themes that will enable them to compete for large center funding which will ultimately enhance our national reputation, and to fuel innovation and commercialization. We have targeted replacement hires for these areas, and have allocated six new hires this past year. There are tremendous opportunities for integration of research across these five Innovation Clusters.

Under the direction of the Institute director, 20 faculty will be hired to join colleagues on campus and conduct research in this building. These faculty are high-caliber researchers. The 20 faculty lines will be held jointly by the I³R and individual colleges to share the investment in recruiting faculty who would also conduct research in the I³R hub building. Some proportion of the faculty would be tenure-track and the others would be “non-traditional” research scientists. There will be potential opportunities for joint appointments with doctorate-degree holding industry experts.

I³R will feature the following distinctive characteristics:

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- Emphasis on entrepreneurship and commercialization through supports provided by economic development office
- Industry focus and engagement
- Potential for new student pathways for those interested in entrepreneurship and commercialization
- Unique intersections between research activities within the I³R

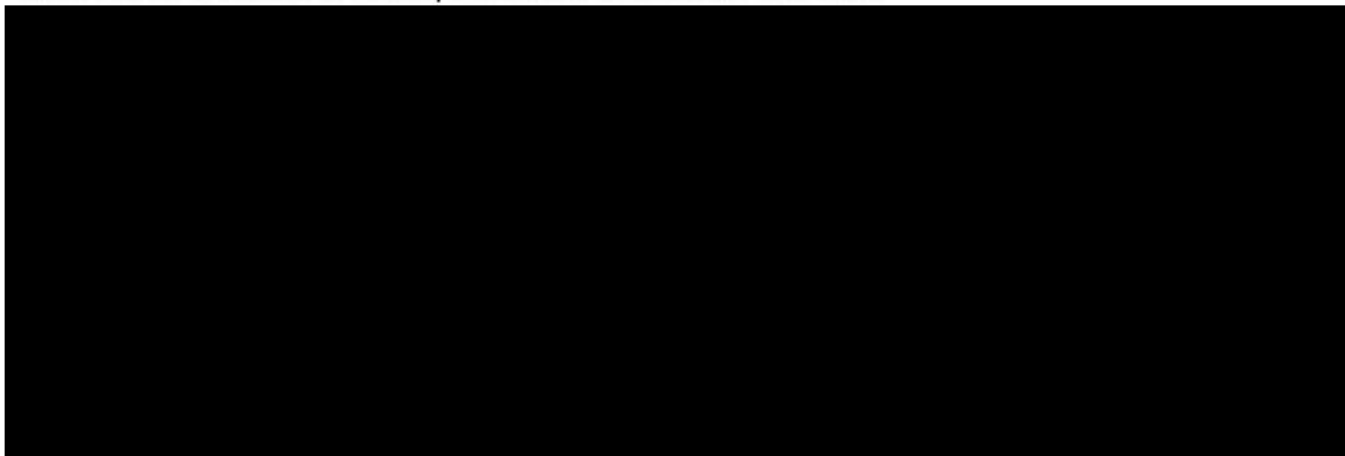
Innovation Clusters/Centers of Excellence

Integration of research across these five areas will ultimately enhance our national reputation and provide a catalyst to greater extramural funding for research and discovery.

- Materials science
- Data science
- Bioscience & bioengineering research in metabolism
- Food + technology: Food systems and the future of food
- Integrative systems neuroscience

These clusters were identified through a rigorous data-driven and interdisciplinary approach that examined: 1) the number of existing faculty and their external grant productivity in each area; 2) the reputation of the programs using available data bases, such as Academic Analytics which allows us to compare research productivity metrics of our departments with others nationally, as well as to recent major awards received by our faculty such as National Science Foundation CAREER awards; 3) potential for commercialization and industry partnerships and the importance of growing commercialization in the biomedical research space; and 4) the potential future for funding (this is particularly true for neuroscience – governing bodies around the world are funding neuroscience research at unprecedented levels right now. In the U.S., the BRAIN Initiative (The Brain Research through Advancing Innovative Neurotechnologies®), (<https://braininitiative.nih.gov>) is underway and slated to invest billions in brain research over the coming decade—it will essentially be the next human genome project.)

U of A deems it is critical to make progress building each cluster together, and not in isolation. These clusters as an intersecting whole provide a unique and distinct advantage that will set U of A and NWA apart. Here are some examples that represent cross-collaboration among two or more of the areas, which could also be of interest to industry and enable collaboration with them:



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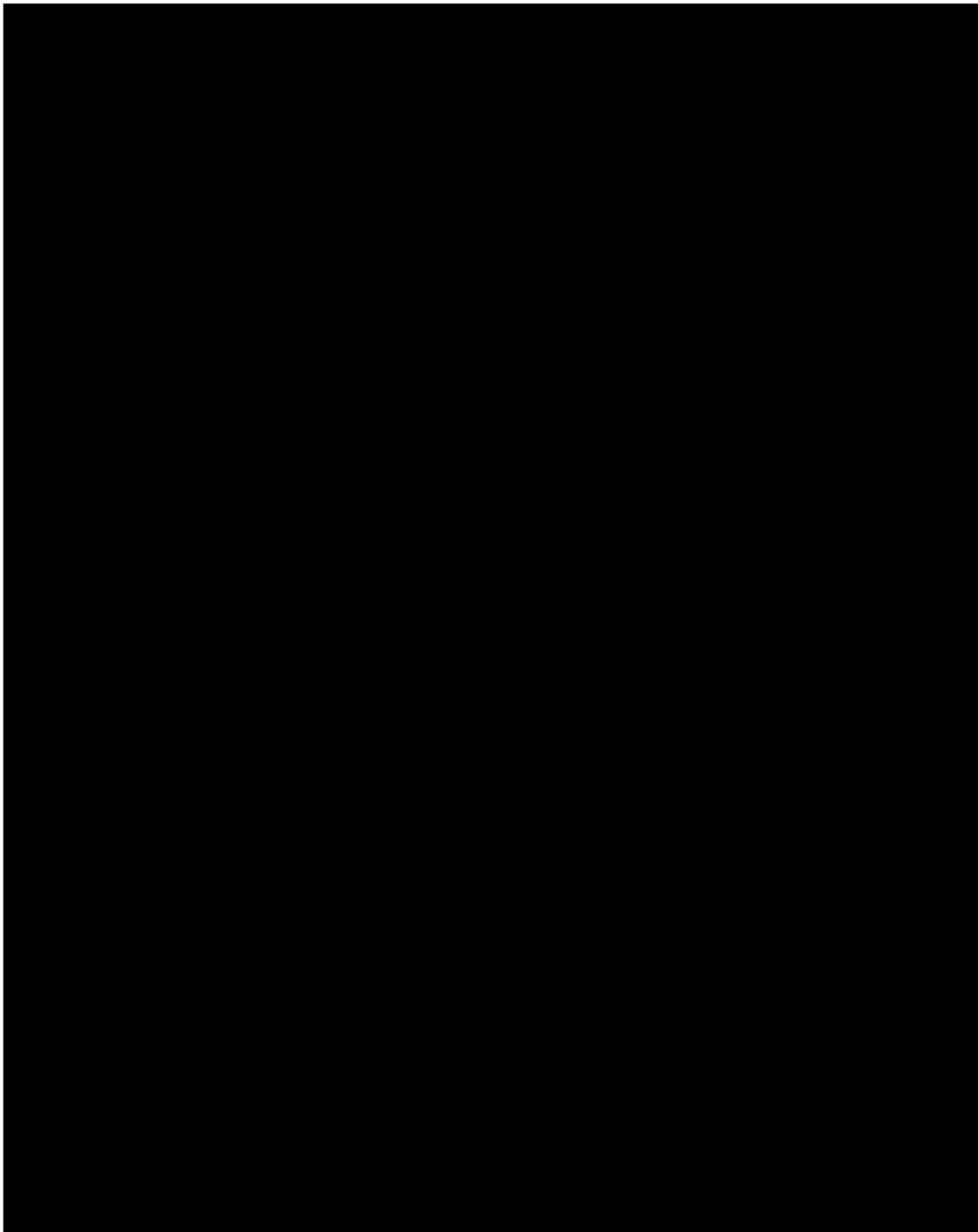


The University of Arkansas is already strong in many domain areas, such as supply chain management, industrial engineering, information systems, and food science, conceptual and systems neuroscience, just to name a few. However, domain expertise alone is no longer enough. Domain expertise and technical skill in data science must be combined to create new knowledge and apply that knowledge to innovate and serve the evolving needs of consumers and societies.

UA's pathway will distinguish the university and the NWA region nationally. Given our size and resources, the distinction will come from the development of an infrastructure to support research at the edges of these disciplines rather than building one or two single areas of excellence. Each cluster has developed a five-year plan to evolve its impact, which contains distinctive priorities for key investments.

The plans for building each cluster are based on their particular needs to drive a significant increase in research volume and commercialization outcomes. For example, material science needs are almost entirely in new equipment and research staff; whereas building in metabolic disease, neuroscience and food will require further a mix of investments in faculty and start-up support, equipment and staff, and data science will require computational infrastructure and key additional hires. Each plan alone was more than \$50 million dollars over five years. We have prioritized what we think will be the critical investments to move each area forward.

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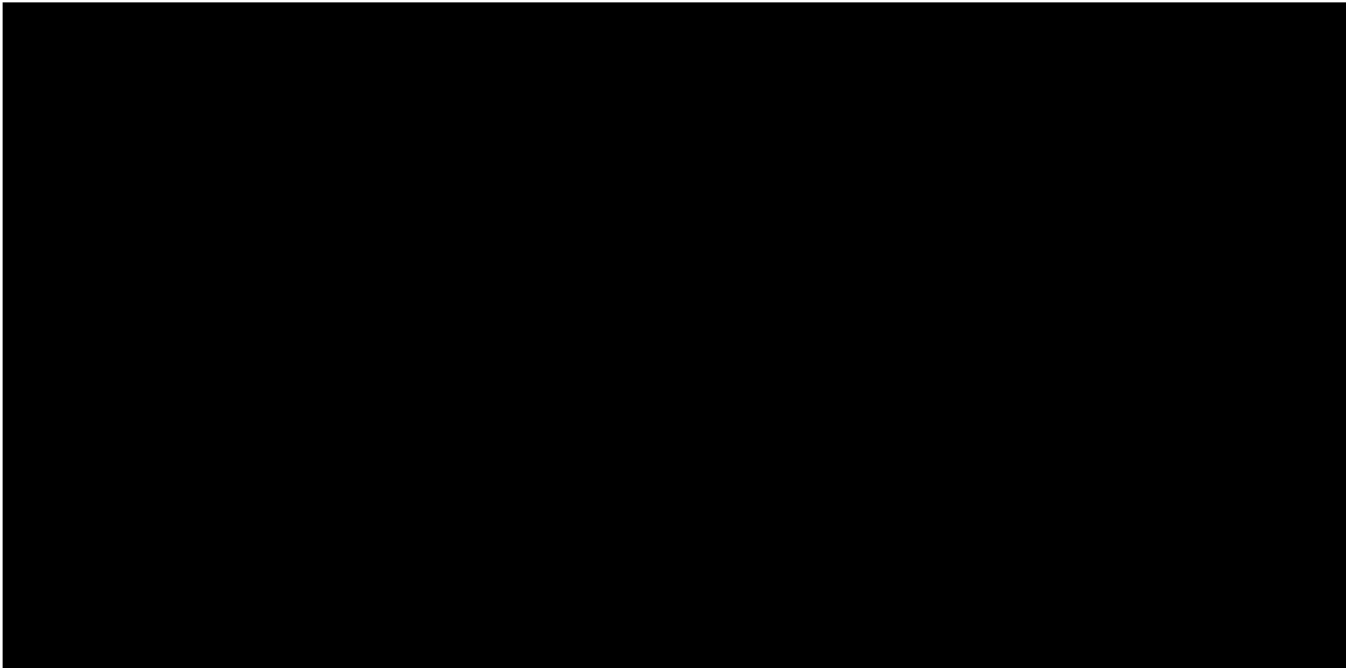


The Research Building

In terms of overall space footprint for campus facilities, the U of A is below average according to comp data. To get to average, we need 225,000 assignable square feet (409,000 GSF) more than we currently have. In terms of ASF of research space per faculty, the U of A is next to last in the benchmark group. U of A will grow and enhance its research capacity through adding additional lab space found in a new research building. The building will house the Institute for Integrative and Innovative Research. The building will facilitate the continuation of growth in research volume and expenditures. Research volume has grown from \$114 million in 2010 to \$177 million in 2019 – a 55% increase, with a growth of 40% in the last five years (from \$126 million to \$177 million).

We will ameliorate our most critical limiting factor for expanding the research engine – the availability of high-quality research space. The building of this additional 100,000 net square foot of high quality, high technology research space that will allow us to hire new research faculty and expand the programs of existing faculty.

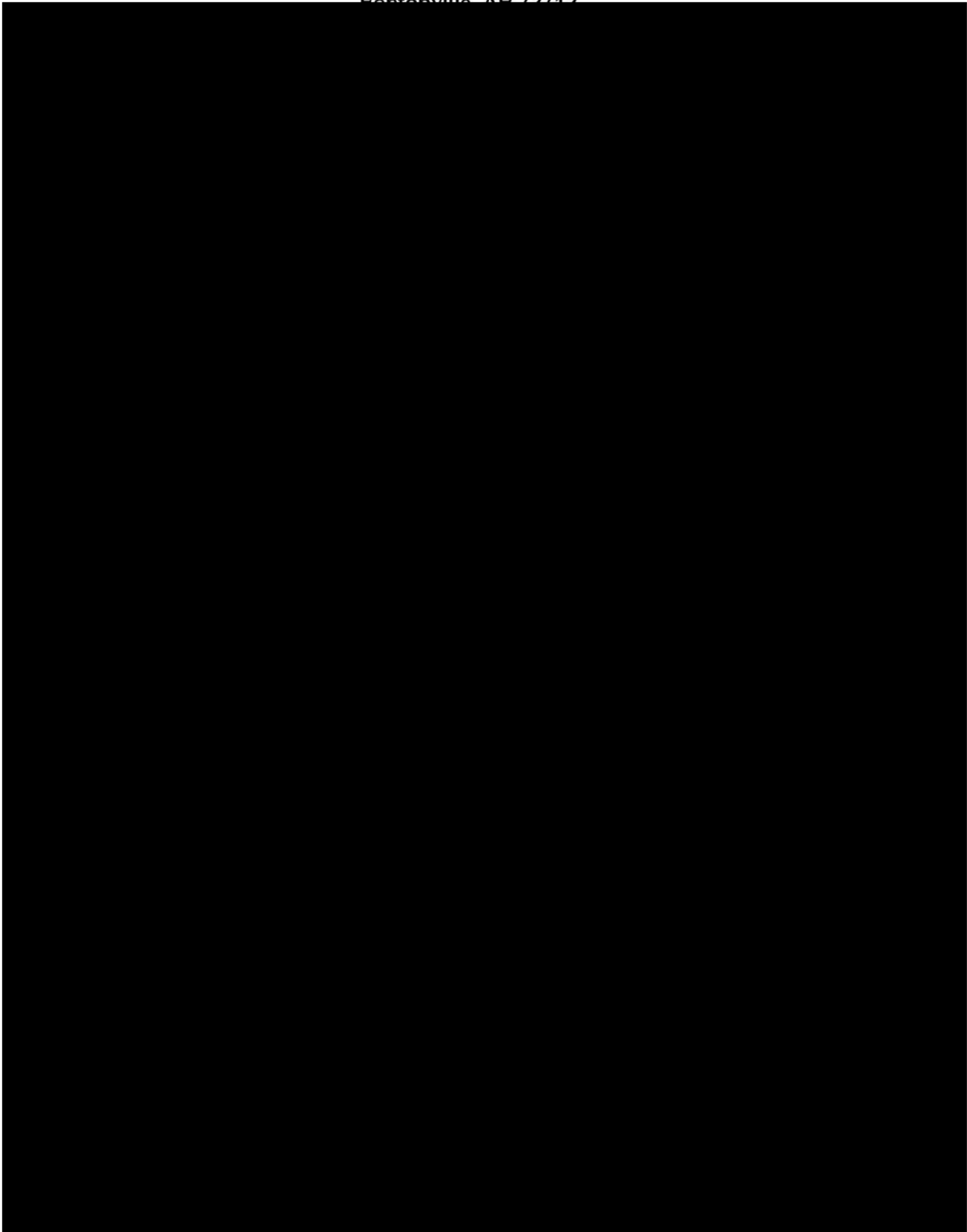
Just hiring the 20 new researchers in the building should result in \$10 million in additional research expenditures per year (assumes that on average, each new hire builds a program of \$500,000/year after five years). We will occupy this collaborative research space with open wet and dry labs with at least 20 new faculty members and their teams of graduate students, postdocs and research staff and the teams of 20-40 existing faculty members, within five targeted research areas that are strengths for the region and/or the university and where research on the edges between these disciplines is likely to spawn breakthroughs (Data Science, Food Systems, Materials Science, Metabolic Disease, Integrative Neuroscience). And we will be positioned well to apply for large team-based grants.



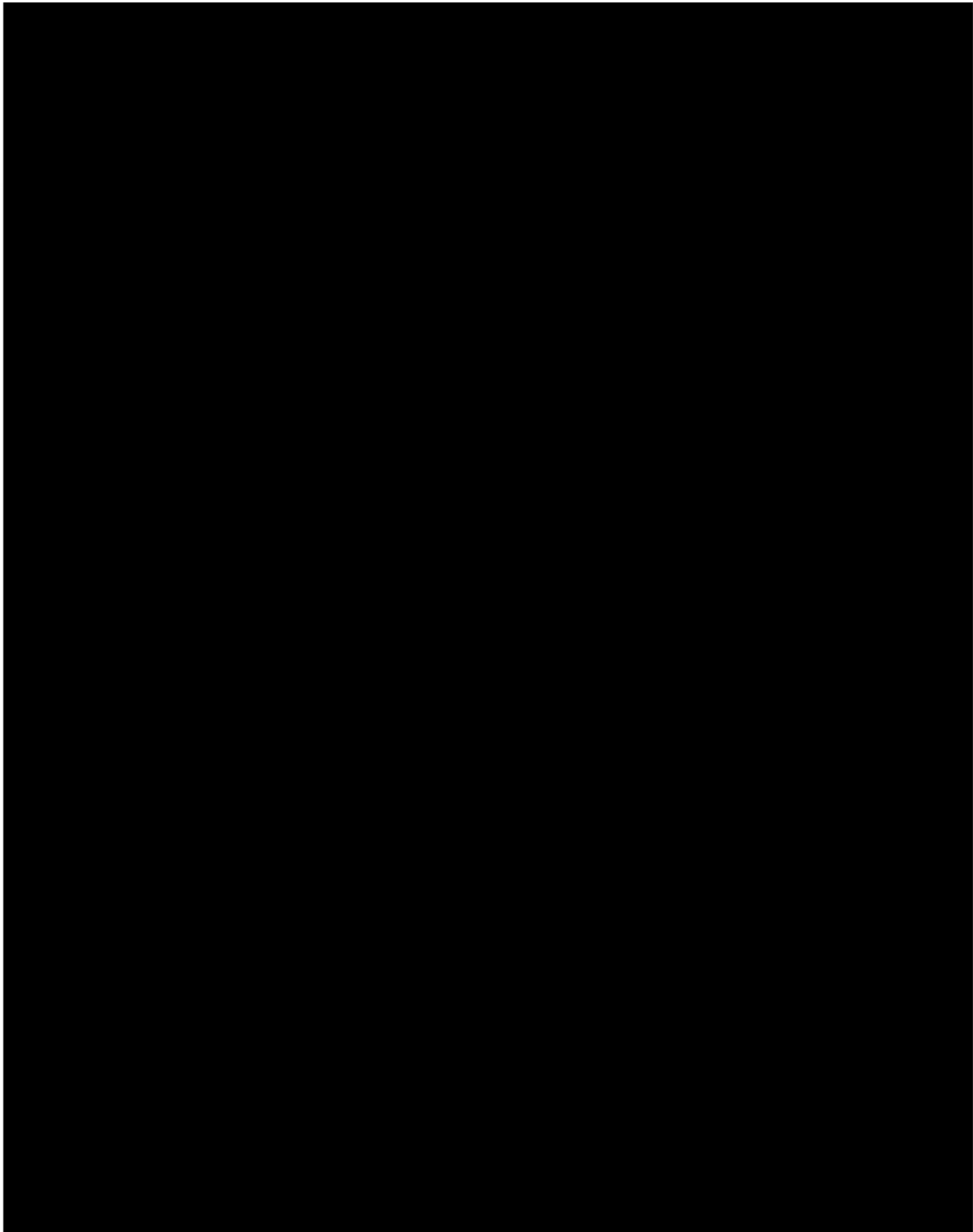
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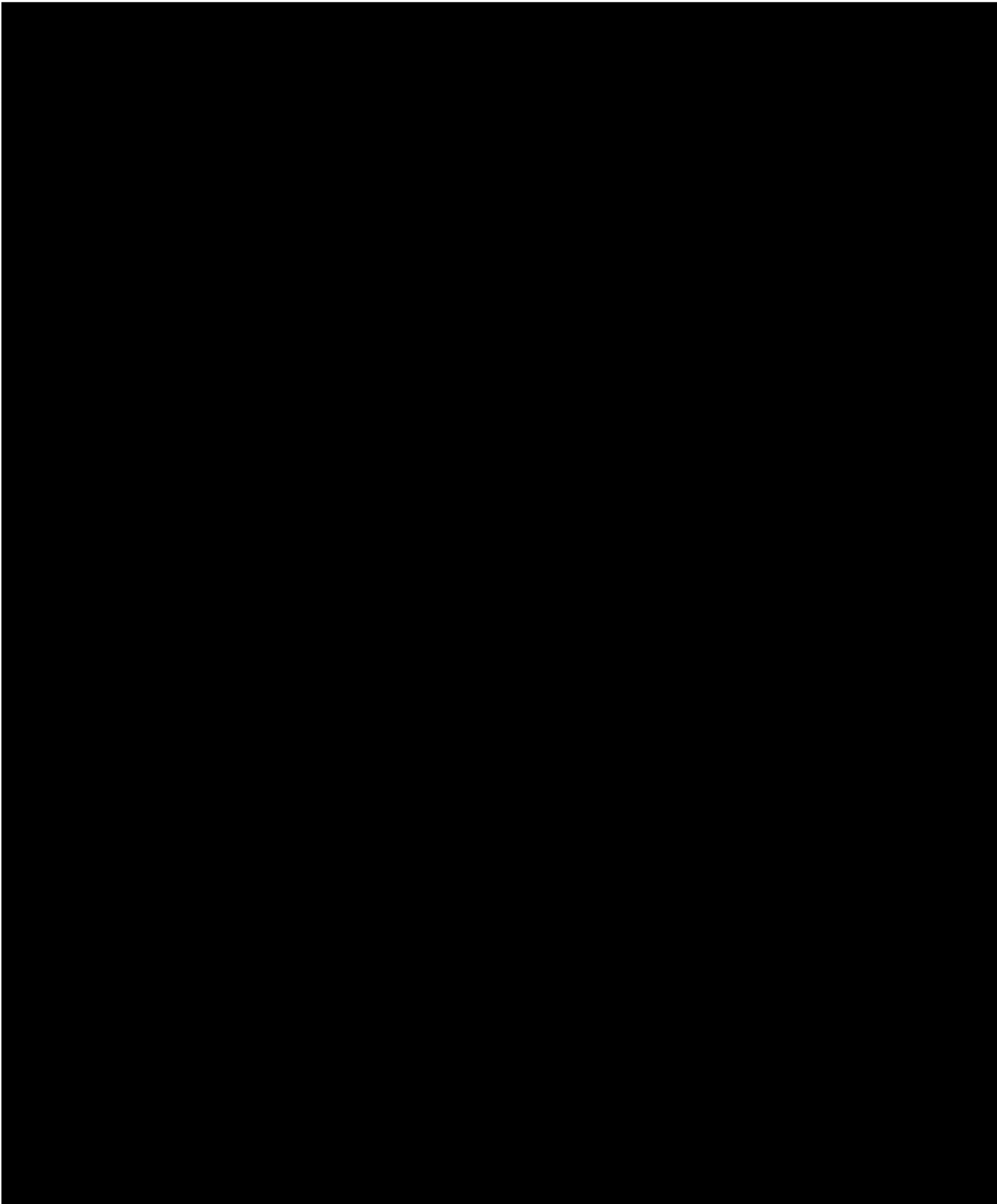
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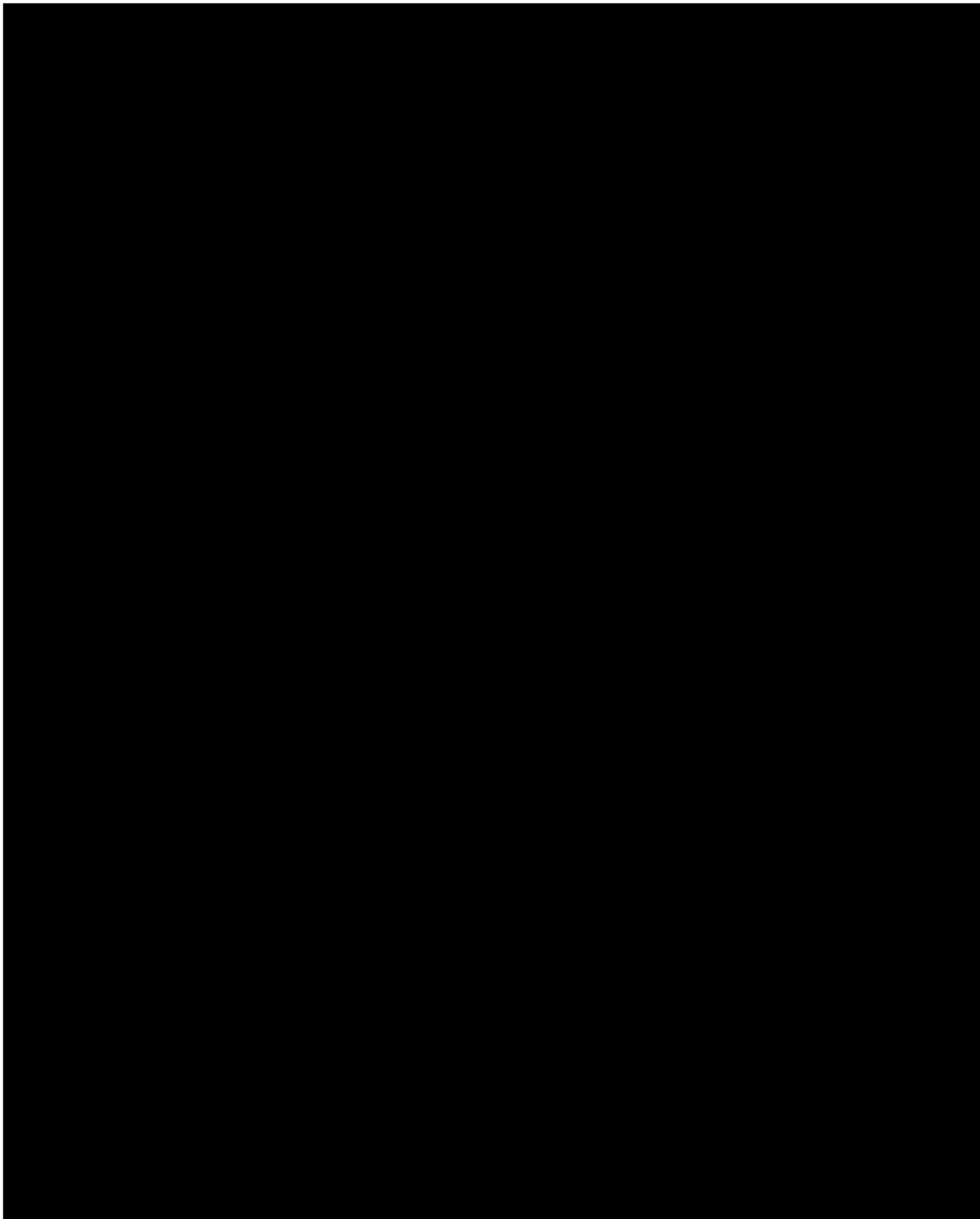
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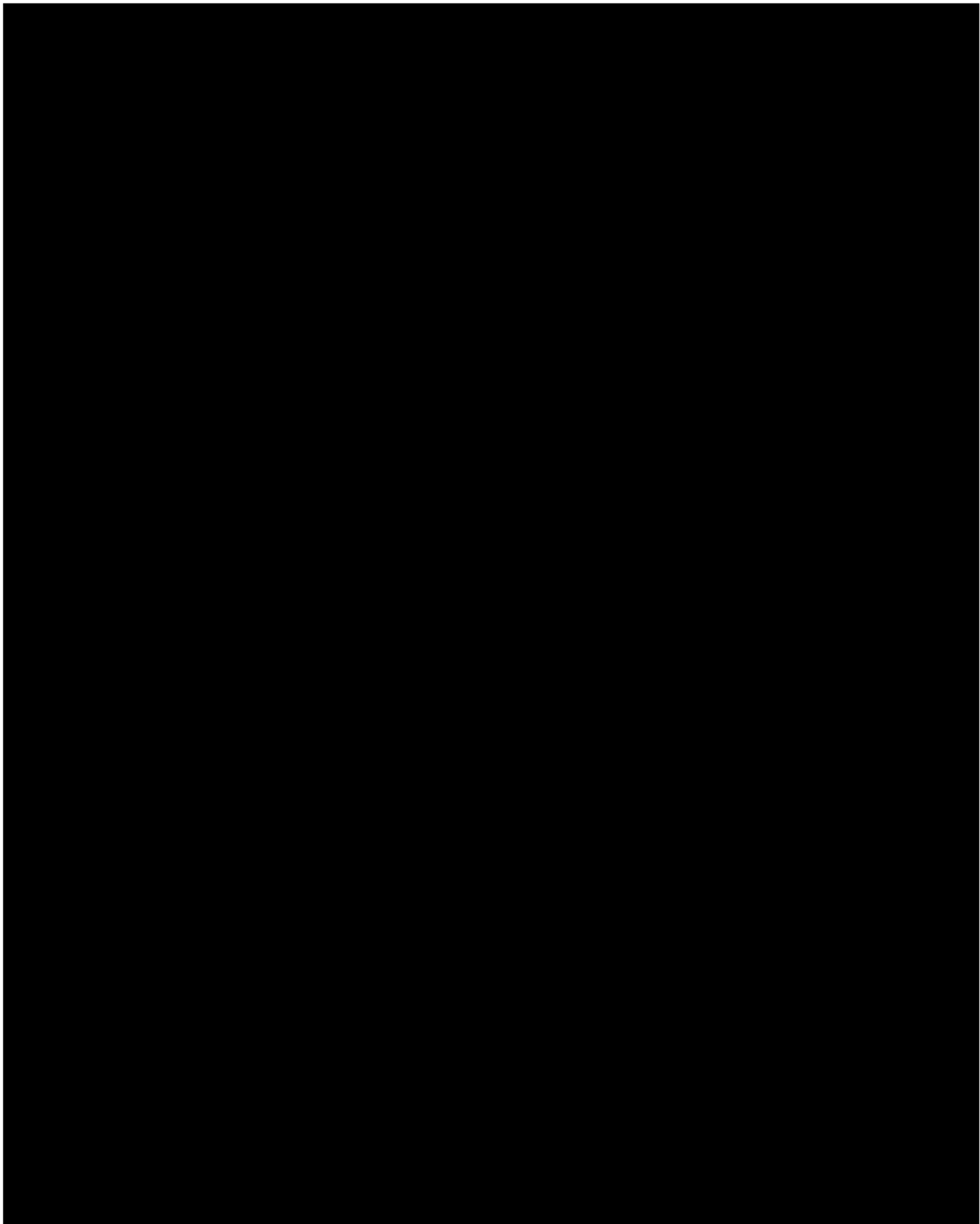
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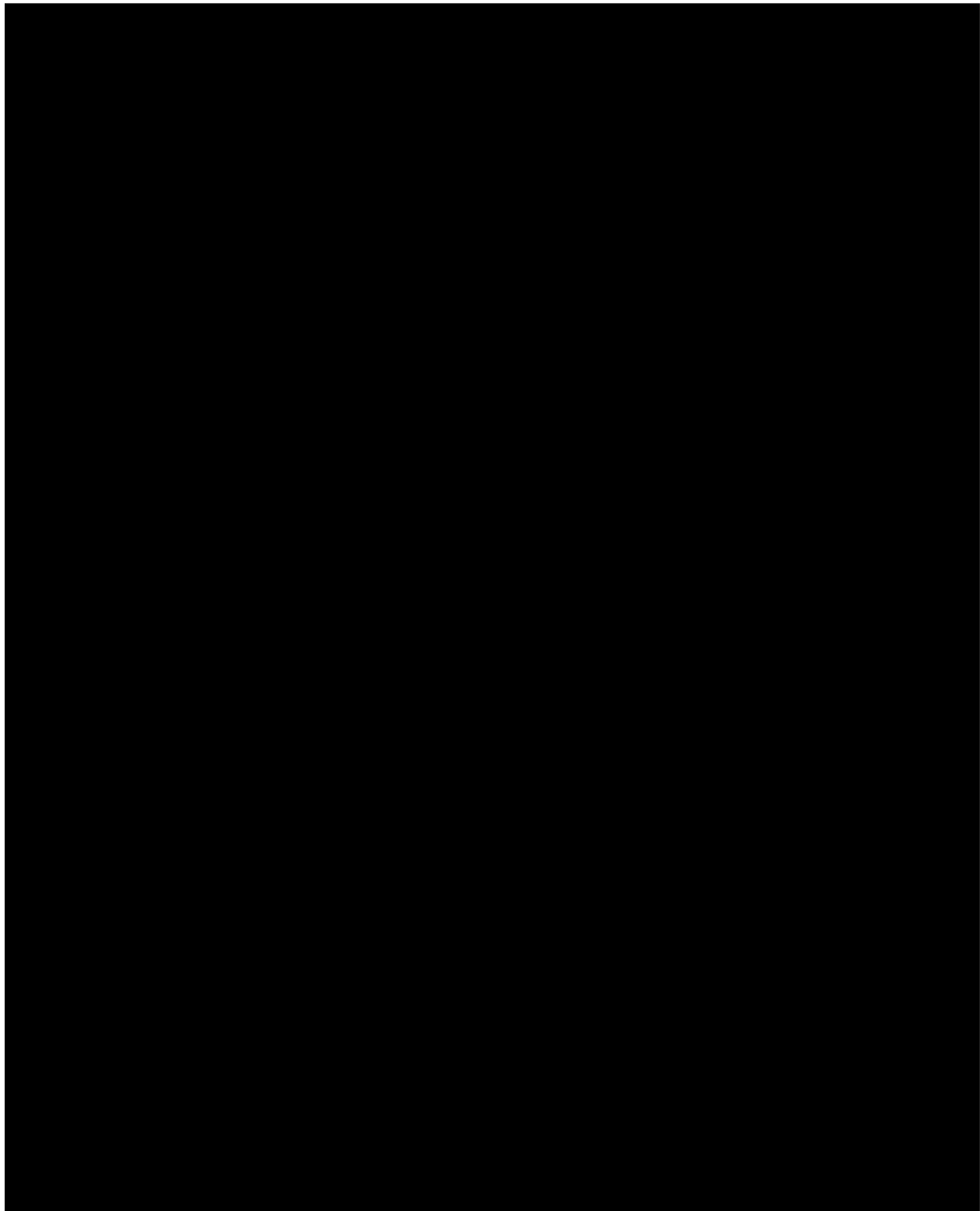
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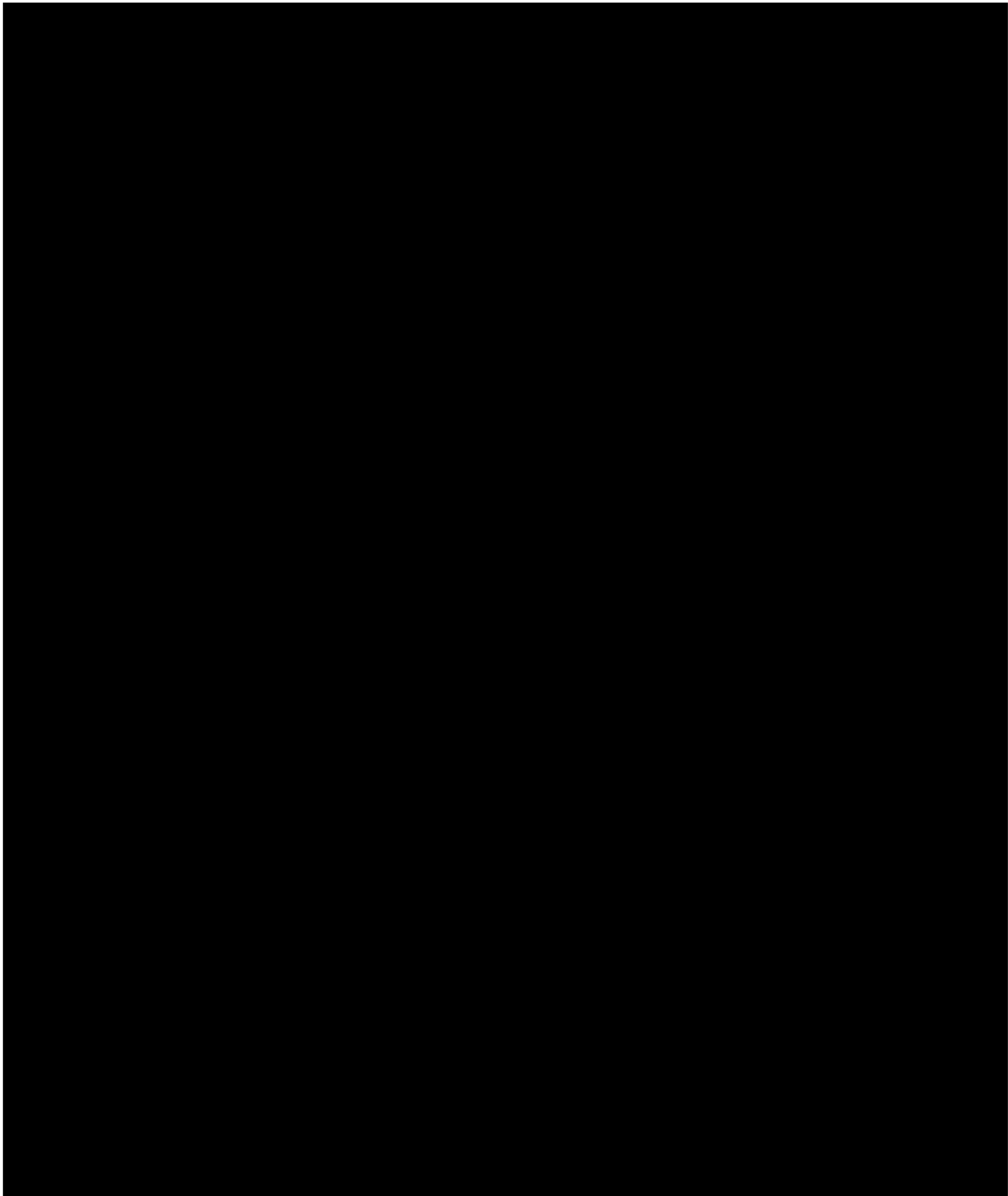
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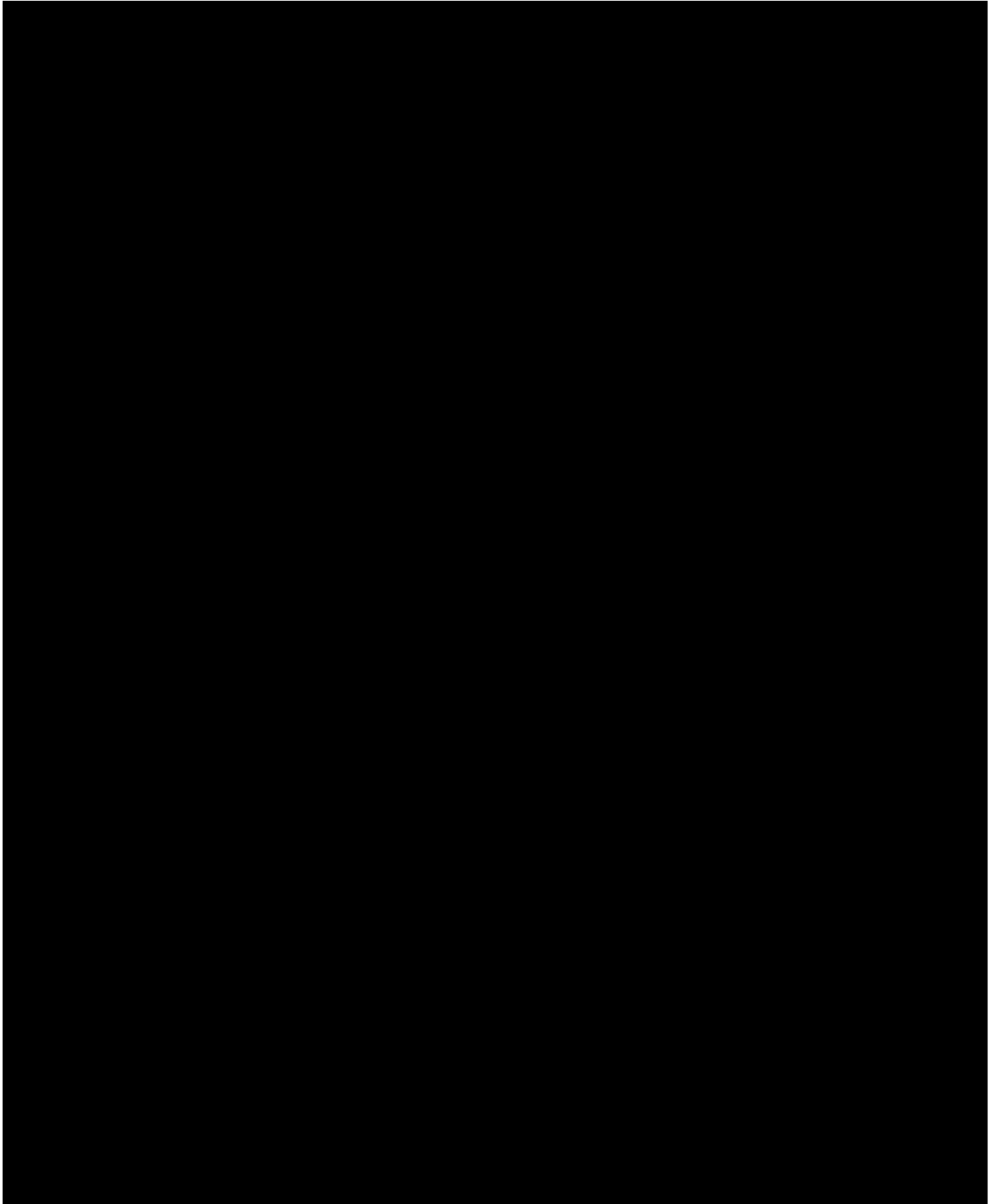
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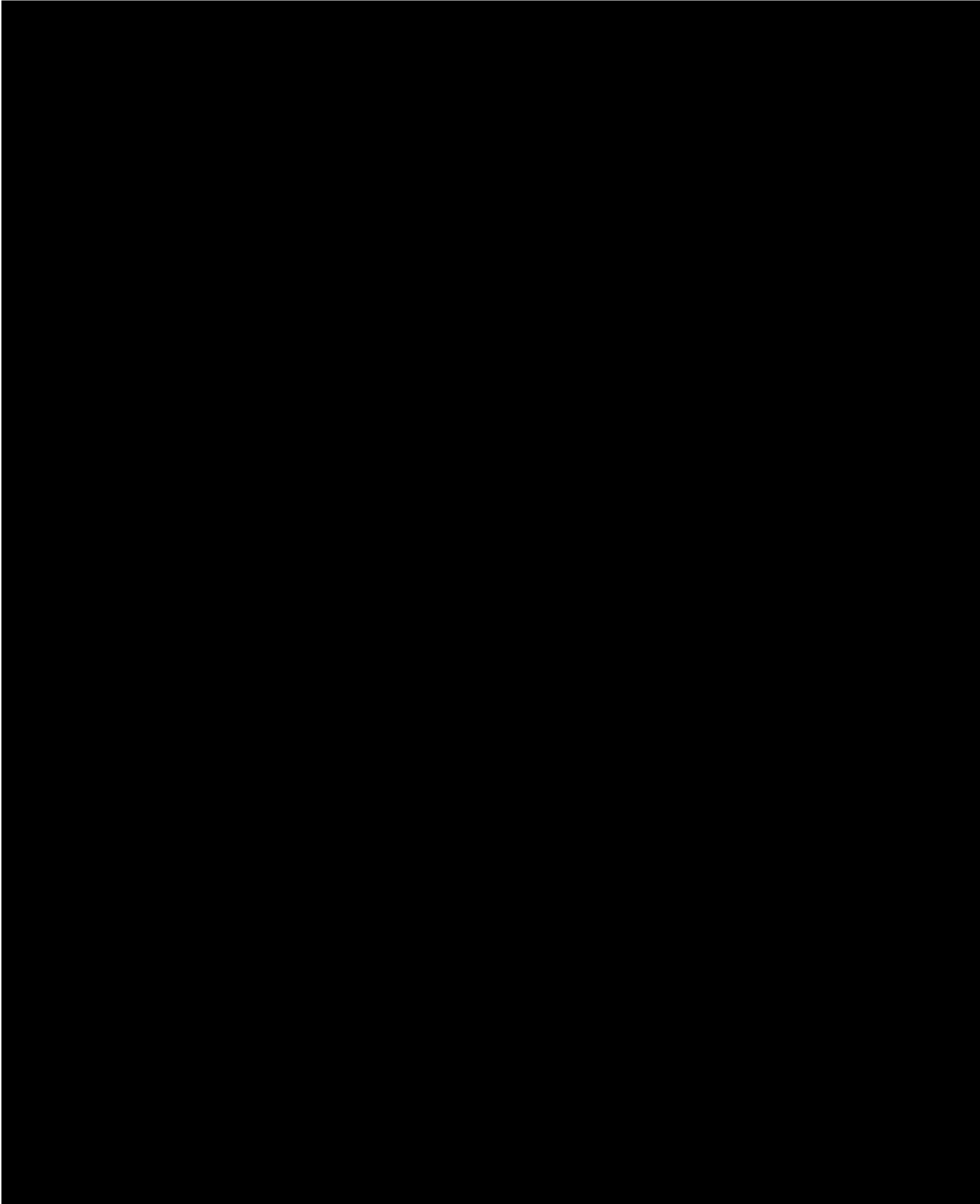
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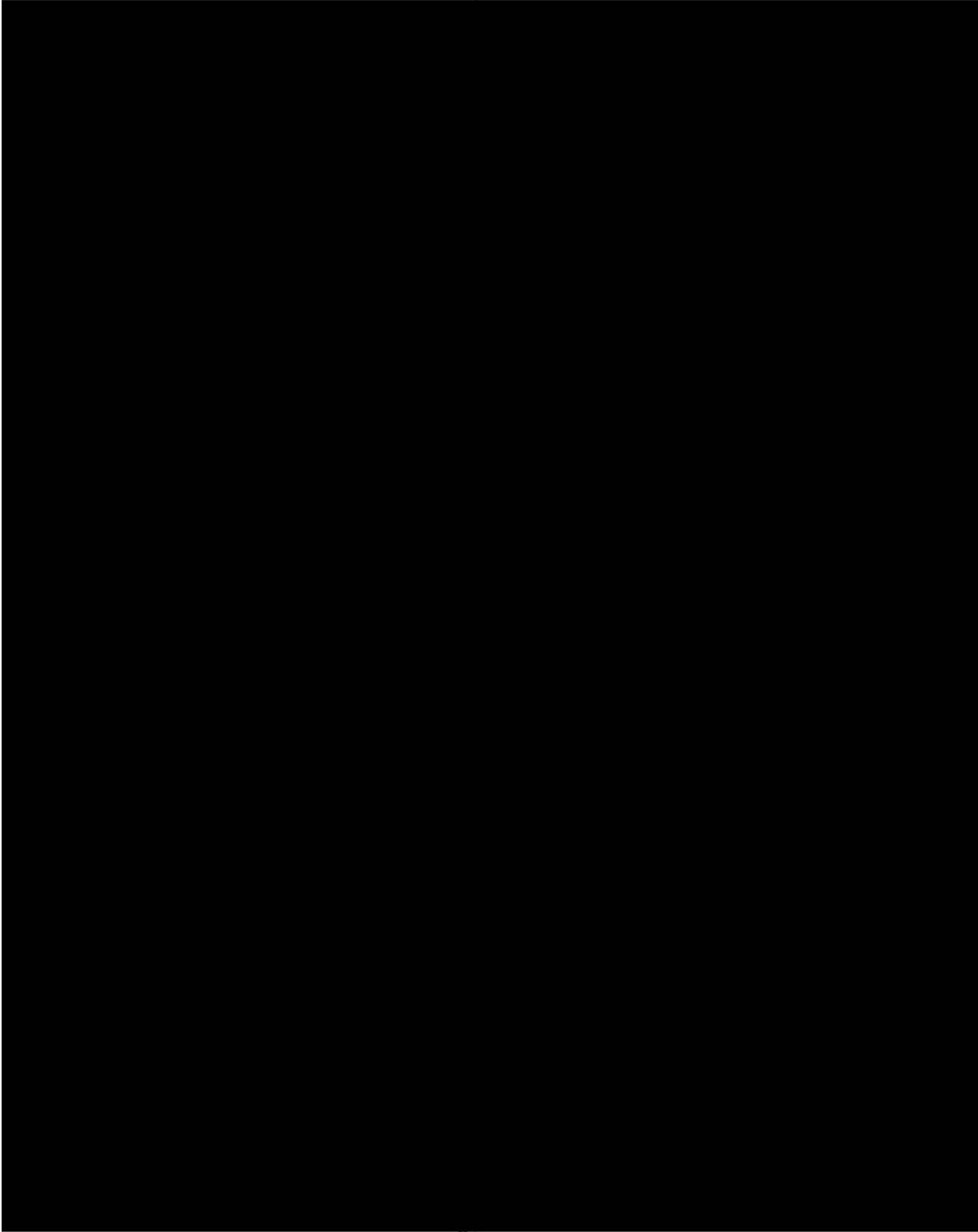
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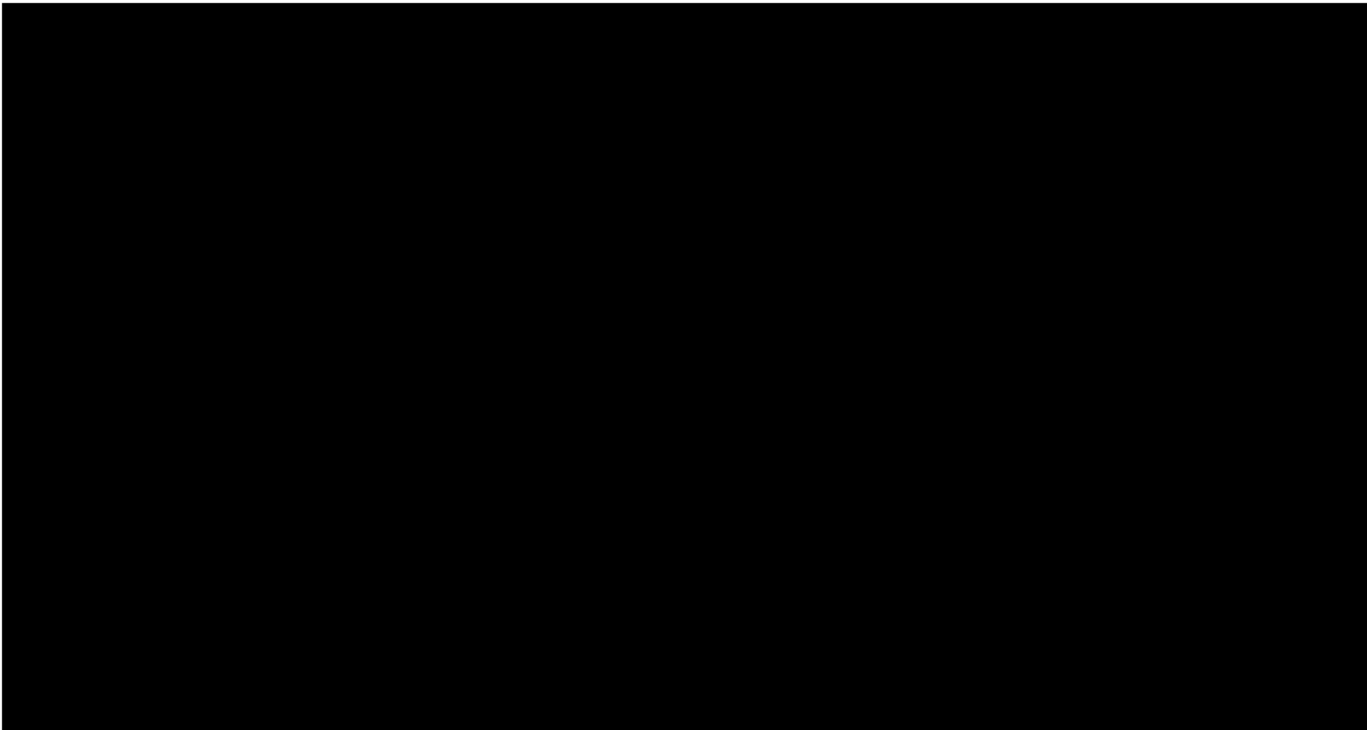
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IN CONCLUSION

All transformational things start with a question.
In this case, the questions asked were:

1. How does the University of Arkansas distinguish itself as a great university among a sea of great and distinguished universities?
2. And how do we do that in a way that drives the economic development and creates clear avenues for industry involvement?
3. And how do we ultimately change the culture of collaboration in such a way that it advances the research and commercialization profile and production of the university?
4. How do we change the way we do science on campus?

One way we can elevate the output and distinguish the University is to brand the university as a place where we can attract and support true innovation. The first step, is to identify areas we are strong in and then to connect those to the areas of strength in the region, and involve industry in ways we haven't, and then to focus on the leading edge of disciplines that we're strong in for serious results.

Universities are built around disciplines housed in departments within schools and colleges – think biology, chemistry, math. This is fine, but the way that discovery happens is when there is cross-collaboration between disciplines and new disciplines emerge.

Our goal is to go beyond disciplinary, collaborative, interdisciplinary research. We want to take it to the next level. Integrative research. Convergence research is another way to put it.

Integrative research is as much a culture as it is a strategy. And this is an important distinction in the traditionally siloed halls of higher education. Integrative research creates an environment that

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encourages researchers to combine ideas, engage in creative thinking, and develop methodologies or approaches, across university bureaucracy, to tackle research problems. Integrated research is at the intersection of traditional fields on their “cutting-edges” that lead to truly innovative discoveries, new directions and at times new fields. It’s silo-busting—and essential in a time when resources are scarce.

Culture is key here. How do we create a cultural transformation in how we do science in and across those areas? The answer: The Institute for Integrative and Innovative Research (I³R).

The hub, as the physical embodiment of that culture, is found in a research building – but emanating outward across campus and throughout the state.

The I³R will be a university-wide presence, not owned or administered by existing academic units. This approach speaks to silo-busting and changing culture.

What is the building like? What makes it special?

The space will be designed to be a welcoming place with shared spaces that beckon collaboration and inspire discovery and innovation. There will be gathering spaces, meeting spaces and also traditional laboratories. But also places for scientists and industry partners to retreat to make creative thought and inquiry come alive.

Combined with shifts in campus resource allocation and culture to augment entrepreneurial and commercialization efforts plus a comprehensive strategy to make serious inroads with industry and the private sector, our shared goals will be realized. The workforce and citizenry of NWA will be better educated, more agile and innovative. The University of Arkansas will be counted among the finest research universities in the world. It will take time and collaboration beyond the borders of campus, but it is achievable.

Appendix B

Phased Funding Budget and Endowment Allocations for Institute of Integrative and Innovative Research (I3R)

Investment	Type	Phase A	Phase A	Phase B	Phase B	Phase B	Total
		Year1	Year 2	Year 3	Year 4	Year 5	
October Payment Schedule:		July 1, 2020- June 30, 2021 (FY21)	July 1, 2021- June 30, 2022 (FY22)	July 1, 2022- June 30, 2023 (FY23)	July 1, 2023-June 30, 2024 (FY24)	July 1, 2023- June 30, 2025 (FY25)	
I3R executive director endowment (faculty)	Endowed	\$15,000,000					\$15,000,000
Hire Five (5) Center of Excellence (Innovation Clusters) directors (faculty)	Endowed		\$10,000,000				\$10,000,000
Startup for Center of Excellence Directors (one time)	Non-Endowed		\$5,000,000				\$5,000,000
Hire I3R faculty (Year 3-5) (faculty)	Endowed			\$8,000,000	\$12,000,000	\$10,000,000	\$30,000,000
I3R faculty startup (Year 3-5)	Non-Endowed			\$4,000,000	\$6,000,000	\$5,000,000	\$15,000,000
I3R staffing (Year 2-5)	Non-Endowed		\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$6,000,000

Appendix B

Phased Funding Budget and Endowment Allocations for Institute of Integrative and Innovative Research (IIR)

***Endowed vs. Non-endowed
annually***

FY21 – October Payment:
\$18,995,000
Endowed \$15,000,000
Non-Endowed \$3,995,000

FY22 – October Payment:
\$51,955,000
Endowed: \$10,000,000

Non-Endowed: \$41,995,000

FY 23 – October Payment:
\$71,955,000
Endowed: \$8,000,000

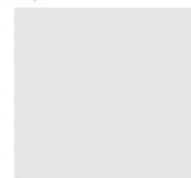
Non-Endowed: \$63,955,000

FY24 – October Payment:
\$22,905,000.00
Endowed: \$12,000,000

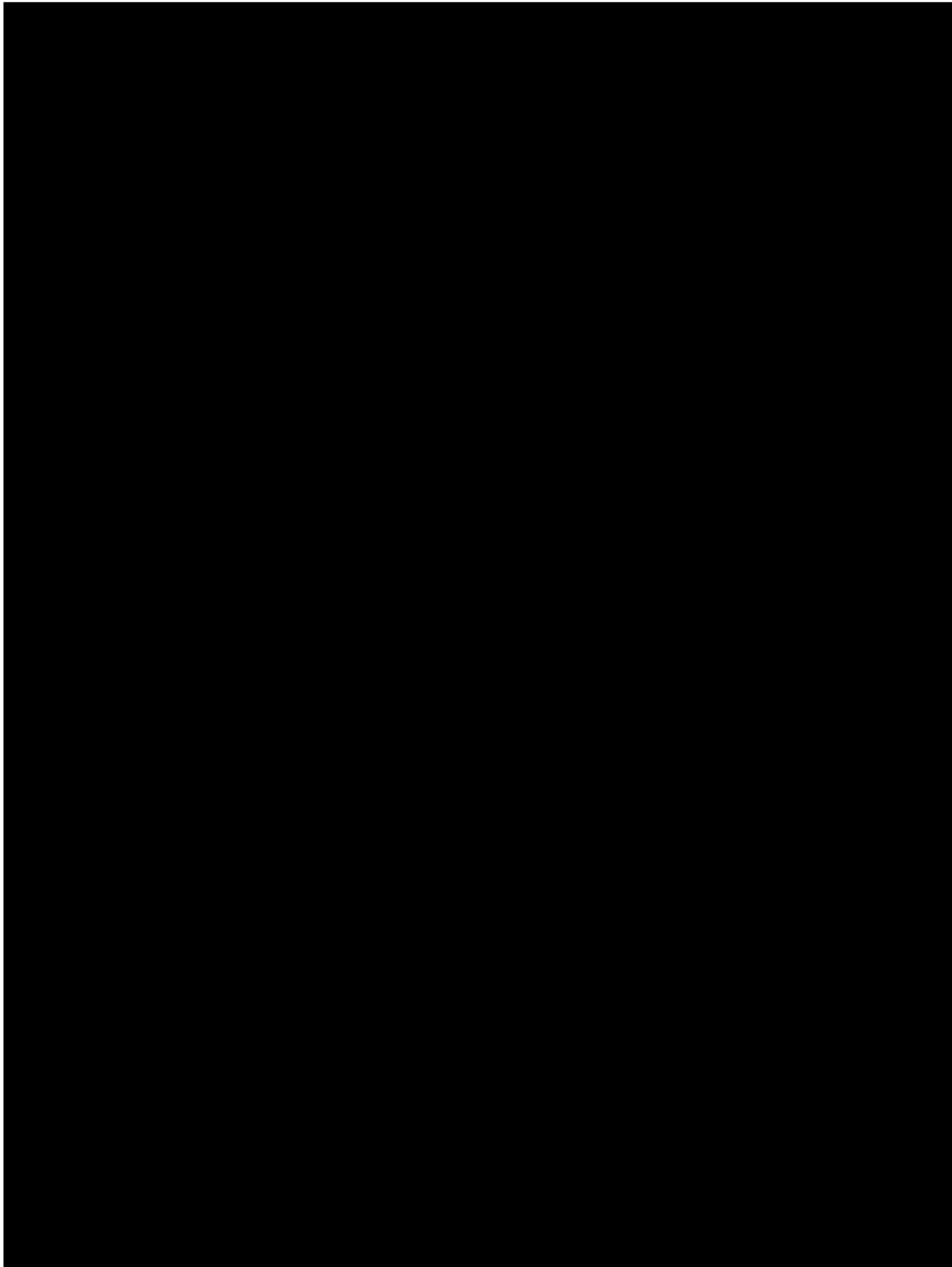
Non-Endowed: \$10,905,000

FY25 – October Payment:
\$28,905,000
Endowed: \$10,000,000

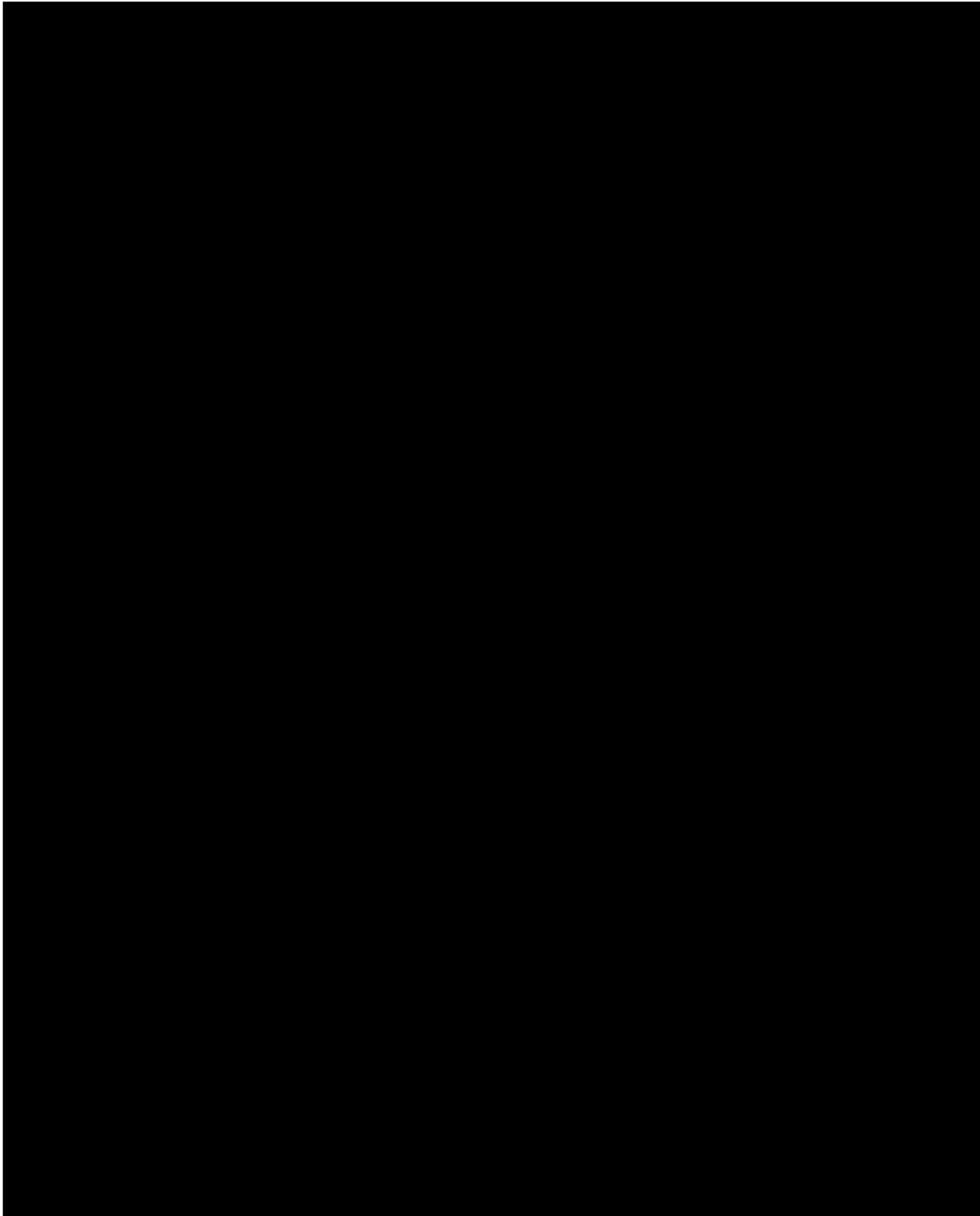
Non-Endowed: \$18,905,000



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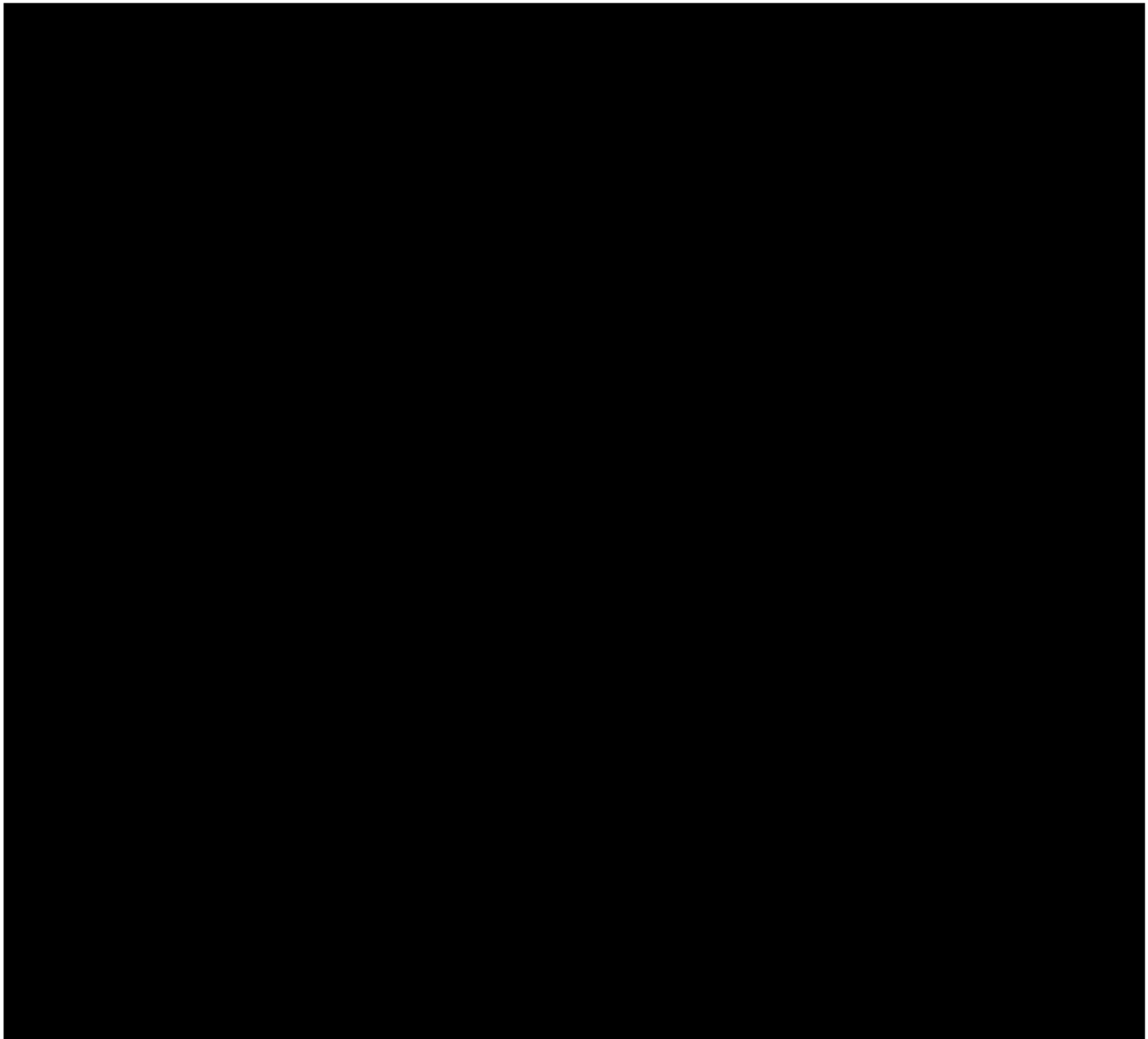
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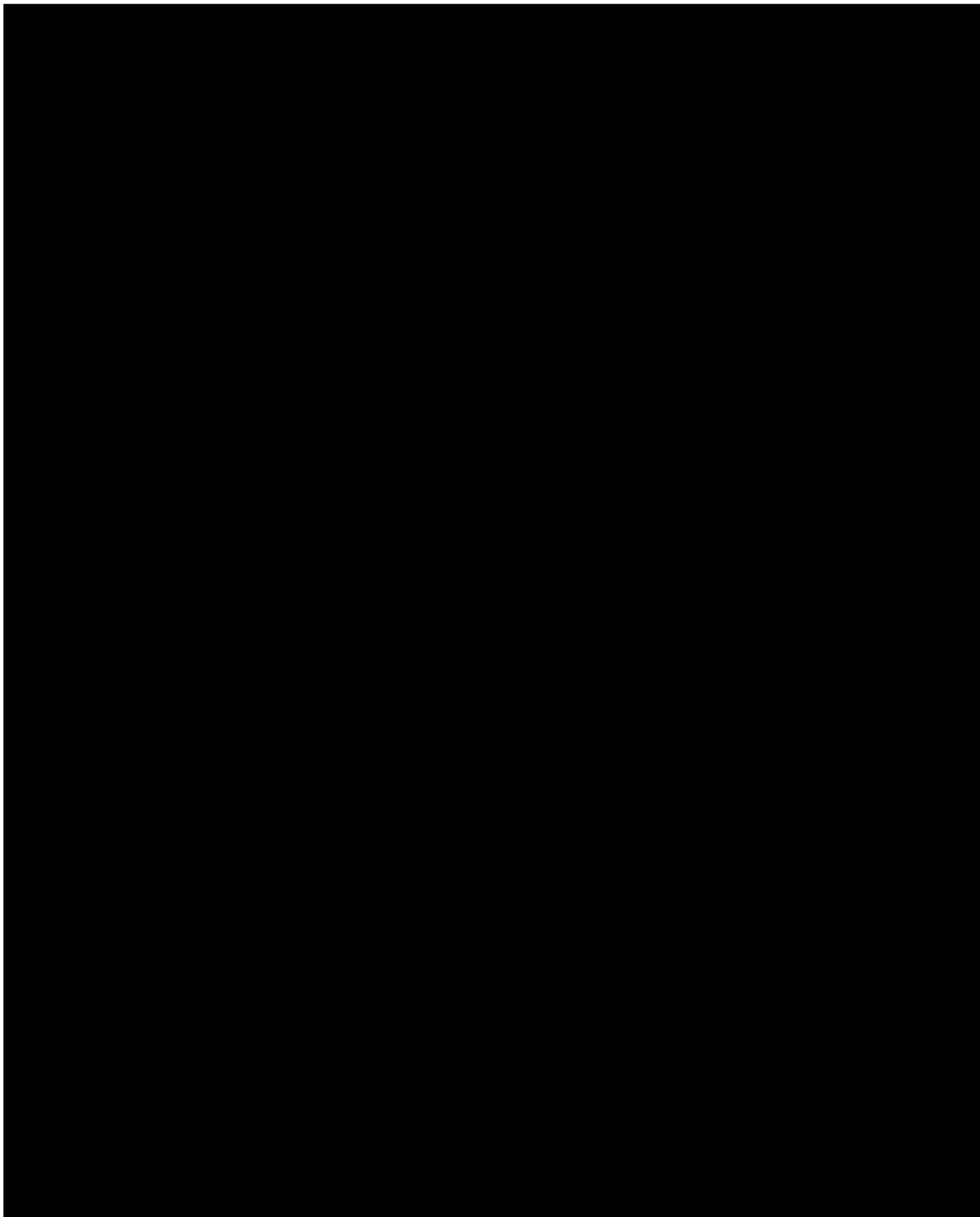
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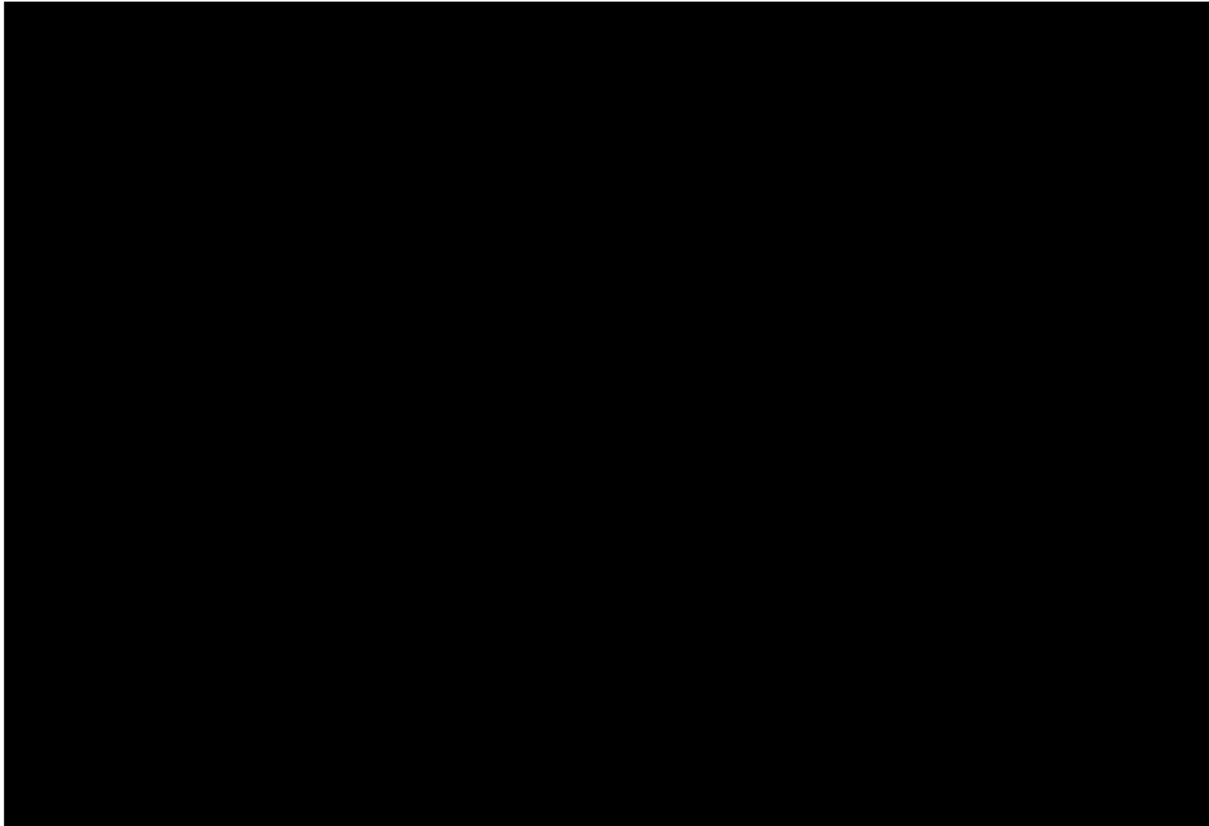
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