Consent Agenda: April ICR Governing Board Meeting

Agenda Item II.a.
Meeting Minutes:
ICR Governing Board
Meeting March 11, 2022
12:00 – 1:00 pm

Meeting By Zoom: https://csupueblo.zoom.us/j/95780770453

In attendance: Dr. Chad Kinney, Mr. Sherard Rogers, Dr. Cinnamon Bidwell, Ms. Elyse Contreras, Dr. Joanna Zeiger, Dr. Jon Reuter, Dr. Malik Hasan, Mr. John Lord, Mr. Sal Pace, Mr. Dieter Raemdonck, Ms. Amber Valdez, Mr. Ean Seeb and Ms. Wendy Fairchild

Meeting Agenda:

I. Welcome (12:00-12:03pm) Dr. Bidwell

II. Consent Agenda (12:03-12:08pm) Dr. Bidwell

- a. Minutes from 02/11/2022
- b. Motion to approve,
 - Dr. Jon Reuter Motion to approve, Dr. Zeiger seconded, all approved
- c. Webinar Data Summary
- d. RFA LOI Summary + Review Process
- e. Senior Scientist Research Priorities for FY23 and Recent Publications
- III. Legislative Update (12:10-12:20pm) Dr. Bidwell with Ms. Valdez and/or Mr. Raemdonck
 - a. JBC Higher Education Budget
 - Ms. Valdez indicated that Ms. Amanda Bickel with the JBC speaks highly of the ICR and its role in the state – JBC membership generally considers staff recommendations closely – Final JBC vote later in March after the JBC receives updated revenue information – most likely count on \$1 million – Amber and Dieter will update us on process
 - Dr. Hasan asks where the marijuana tax cash funds are going Ms. Valdez explains that this fund is a significant source of discretionary funds. As a result there are many demands of this funding, including capital construction on schools – Dr. Hasan would like to ask for more money and raise the baseline amount
 - Dr. Bidwell asks if there is anything we can to do to ensure we achieve our full funding request to fulfill or role and mission - what are the most effective talking points? What do concrete plans look like? What do roles look like? What are action plans?
 - Dr. Kinney lots of needs in the state addressed by marijuana tax cash fund– need to be strategic in what is requested and follow guidance where provided.
 - Ms. Valdez identified key legislative leaders in general we (Board, ICR Staff, and Govern. Relation. Reps.) need to continue to educate the legislature about the ICR more many legislators don't know us and they have already made decisions related to funding strong support in Pueblo and Dr. Kinney can talk to Pueblo folks. May want to reach out to other universities that are actively engaged in cannabis research to communicate the need/benefits of resources to support cannabis research to their representatives in the legislature.
 - Mr. Raemdonck build regional and national recognition many legislators are excited to make the ICR a leader in research but they don't have a lot of funding to support this – we have to continue to demonstrate good

stewardship of funds and quality products

- b. Next Steps in the Budget Process.
 - Ms. Valdez suggests Dr. Kinney create one pager to distribute toe legislators
 - Dr. Hasan asks Ms. Valdez to send ICR GB members list of name of legislators says critical time, I there anything else we can do?
 - Ms. Valdez will suggest marijuana tax cash funds go to research if any money available – she will let board know the status
- IV. Preliminary Budget Presentation (See Executive Summary for Proposed Budget; 12:20-12:45pm)

Drs. Bidwell. Hasan, and Reuter

- a. Proposed Budget
 - \$3.6 million budget if full budget request received
 - \$1.8 million if no additional funds appropriated
 - If something between these amounts we will develop new budget that reflects the two budgets presented
- b. Board Feedback
 - Dr. Kinney notes research is top priority, which is reflected in both budgets presented
 - If awarded only \$1.8 million there won't be many changes to the FY22-23 budget compared to the current fiscal year budget - Without additional resources, funds will not be available support for new research projects starting next fiscal year.
 - Dr. Kinney recognizes that the Sr. Scientist has been successful at acquiring some external funding and has been very productive with the resources provided through the ICR – suggests rewarding productivity with a modest increase in research resources, which was supported by the Budget Subcommittee
 - Questions from board about the lack of a budget line for the conference Dr. Kinney explains that OSU/GHIC is taking the lead in planning the event in 2022, and expects that the event will be budget neutral going forward. little expense this year (honorarium), FY23 and FY24 should be budget neutral or small expense FY24funds budgeted for the conference next year can be reallocated if not needed for the conference
 - Ms. Contreras asks if we can accept money from other sources
 - Dr. Kinney says yes, as long as it is too support unbiased research or activities – mentioned a donor that reached out this week that wishes to leave some resources in their will to the ICR to support future research.
 - Dr. Hasan asks about NIDA money Dr. Kinney supports once we are prepared to pursue this
 - Mr. Seeb discusses history of requesting donations, grants, etc. and points out the past difficulties and thanks select Board members and staff for being persistent
 - Dr. Zeiger mentioned NIDA put out a release last week
 - Dr. Bidwell suggests Dr. Kinney and Dr. Park discuss what funding from NIDA would be good fit for ICR then bring back to Board or discussed with as part of a meeting of the Research Subcommittee
 - Dr. Hasan says ask for larger amount from NIDA
 - Dr. Kinney asks that someone on the Board to make a motion to approve the budgets as presented with the understanding that if a budget increase less than \$1.8 million occurs a budget similar to those presented will be developed, with the primary point of adjustment being the amount of funds allotted for new research projects

- o Dr. Hasan makes the motion, Dr. Reuter seconds all approve
- Dr. Zeiger would like to be on call regarding NIDA
- c. Action items for final budget draft

V. In person Meeting (12:45-12:50pm) Dr. Kinney

- a. May Meeting (05/13/22)
 - Board in person meeting in May Grant-Humphreys Mansion– Ms. Contreras inquired about a call-in option Covid precautions discussed
 - Dr. Hasan offered his residence as a potential location for an in person meeting.
- b. Extended Meeting (9:30am 1:30pm-ish) with a working lunch
- c. Grant-Humphreys Mansion in Denver
- d. RSVP requested
 - Ms. Fairchild will send out email invitation

VI. Research Subcommittee Vacancy (12:50-12:55pm) Dr. Kinney

- a. RFA Parameters and Priorities (e.g. allowable budgets, F&A rate, research priorities)
- b. Self-nomination or nominations from the floor
 - Former board member who left leaves vacancy on research subcommittee
 - Ms. Contreras, Dr. Zeiger, and Dr. Reuter all volunteered to join this committee

VII. Public Comment (12:55-1:00pm) Dr. Bidwell

- No members form the public in attendance
- Dr. Hasan wanted for the record his compliment of Dr. Kinney as "very good director of the ICR" - All board members agreed

VII. Adjourn

Agenda Item II.b.

Fully executed MOU between ICR Governing Board and Colorado State University Pueblo.

STATE OF COLORADO

Memorandum of Understanding by and between Colorado State University Pueblo and the Governing Board of the Colorado Institute of Cannabis Research

I. PARTIES

This Memorandum of Understanding ("MOU") is entered into by the Board of Governors of the Colorado State University System ("Board of Governors"), acting by and through Colorado State University Pueblo ("CSU Pueblo"), and the Governing Board of the Colorado Institute of Cannabis Research ("Governing Board"), hereinafter referred to jointly as the "Parties."

II. PURPOSE

The Parties have entered into this MOU to address each of their roles with respect to the operations of the Institute for Cannabis Research (the "Institute") which is hosted by CSU Pueblo with oversight by the Governing Board.

III. EFFECTIVE DATE

This MOU shall not be effective or enforceable until it is executed by both Parties (hereinafter called the "Effective Date") and shall be effective and enforceable thereafter in accordance with its provisions.

IV. TERM

The Parties' respective performance under this MOU shall commence on the Effective Date. This MOU shall automatically expire on June 30, 2025, congruent with the close of the State's fiscal year, unless extended by prior written agreement

of the Parties. This MOU may only be amended through written agreement by the Parties.

V. STATEMENT OF UNDERSTANDING

A. Funding.

- 1. As set forth in the Long Bill, the General Assembly annually allocates funds to support the Institute. These funds will be distributed from the State to CSU Pueblo for the benefit of the Institute.
- 2. The Institute shall propose an annual budget no later than March 31 or the last business day of March each year. The annual budget shall be subject to the Governing Board's approval.
- 3. The annual budget shall identify a division of the funds allocated by the General Assembly to be used by the Institute and the Governing Board. The funds for use by the Institute will be held in a CSU Pueblo operating account (the "Operating Account"). The funds for use by the Governing Board will be held by the Colorado Department of Higher Education (CDHE) and will be transferred from CSU Pueblo to CDHE within one month of the start of the fiscal year.
- 4. The funds in the Operating Account will be spent in accordance with the annual budget and will not be used for any other CSU Pueblo expenditures. The director of the Institute will manage these funds and the Institute's budget. The Institute may spend the money received from the general assembly pursuant to the Governing Board approved budget and in accordance and

compliance with CSU Pueblo and CSU System policy and procedures, including all fiscal and purchasing rules, legal review, and delegated signature authority.

- 5. As part of the annual Institute budgeting process, and upon reasonable request, CSU Pueblo and the Institute will provide reports detailing the use of the funds within the Operating Account to the Governing Board.
- 6. CSU Pueblo may continue to pursue and accept research funding on behalf of the University. These funds are administered by CSU Pueblo in accordance with its usual and customary processes and procedures. CSU Pueblo may accept and expend revenue generated by CSU Pueblo's activities, including any fees or interest earned on the money and revenue generated from the sale or license of intellectual property it has or obtains rights to. CSU Pueblo may solicit, accept, expend, and disburse all money collected by CSU Pueblo for the purposes of conducting research it is legally permitted to conduct and disseminating the results of such research publicly, consistent with the role and mission of CSU Pueblo and federal law.
- 7. The Institute may seek, accept, and expend gifts, grants, or donations from private or public sources. The Institute may accept and expend other revenue generated by the Institute, including any fees or interest earned on the money and revenue generated from the sale or license of Institute intellectual property as approved by the Governing Board.
- 8. The Colorado State University Research Foundation ("CSURF") manages the licensing of CSU Pueblo intellectual property ("IP"). For this service,

they retain forty percent (40%) of net revenues from each license. The remaining sixty percent (60%) is distributed as follows: 35% to inventor(s), 10% to the inventor(s) department or college and 15% to the Vice President for Research ("VPR"). For purposes of the MOU, the parties have agreed that for IP that arises out of research conducted by the Institute, the Governing Board will receive the VPR share of 15% and the CSU Pueblo will be treated as the department or college and receive that 10% share. The inventor(s) share shall remain unchanged.

9. In no event will the Institute or CSU Pueblo accept funds which are derived from activities which they reasonably believe are illegal under Federal law or which they reasonably believe they may not accept under State or Federal law. The Governing Board may solicit, accept, expend, and disburse all money collected for the Institute for the purposes of conducting research related to cannabis and to disseminating the results of such research. Any such funds must be held, disbursed, and expended by the Governing Board in its own name.

B. Personnel; Reporting.

1. CSU Pueblo shall and currently employs a director for the Institute, who shall remain an employee of CSU Pueblo. The Governing Board shall provide feedback to the President for use in the annual evaluation of the director. If a search for a new director is needed, CSU Pueblo's President is the hiring authority for the director. The Governing Board is the search committee to the CSU Pueblo President, and CSU Pueblo will provide staff support for the search process.

- 2. The Governing Board and the director will regularly communicate about the Institute's operations, following best practices for governing boards and professional staff. The CSU Pueblo President is the supervisory authority over the director. Also, the director has supervisory authority over any other CSU Pueblo employees who are appointed by CSU Pueblo to work with and for the benefit of the Institute.
- 3. The director shall produce an annual report that describes the research funded through the Institute in the previous year and an accounting of the Institute's spending for the previous year. The Governing Board shall submit the annual report to the Joint Budget and Education Committees of Colorado's General Assembly, or any successor committees. The Governing Board shall comment on the annual report to advise the General Assembly on the efficacy of the Institute as related to its role and mission.
- 4. The Institute's annual budget will include and pay for the services of the director and any additional personnel dedicated to the Institute's operations. The annual budget will not include, and the Operating Account will not be used for services provided by CSU Pueblo employees that do not relate to the Institute or the Governing Board.

C. Annual Conference; Journal

1. The Governing Board and the Institute shall conduct an annual symposium to disseminate the results of the research that they fund. Any entity or institution of higher education that receives research funding from the Governing

Board or the Institute shall present its research results at the annual symposium in the year after the research is concluded. The Institute will facilitate such presentations for the Governing Board provided however that Institute will have no obligation to facilitate or allow any presentations which could subject it to legal liability.

- 2. CSU Pueblo previously established an annual cannabis research conference that includes the presentation of the Mechoulam Lecture. The Parties agree and acknowledge that CSU Pueblo may continue to conduct this conference, with its own funding, in the event the Institute is no longer housed at CSU Pueblo.
- 3. Similarly, CSU Pueblo is currently publishing the Journal of Cannabis Research under a contract with Springer Nature. There shall be no limitation on the rights of CSU Pueblo to continue to publish the Journal of Cannabis Research, with its own funding.

D. Facilities and Administration.

- 1. CSU Pueblo has been and will continue to provide the same or similar facilities for the Institute and its operations, as well as for the use of the Governing Board, including, but not limited to, office and meeting space. CSU Pueblo has been and will continue to be responsible for cleaning and maintaining such facilities in good working order.
- 2. CSU Pueblo has been and will continue to provide standard administrative support for the Institute and its operations.

3. The Governing Board and the Institute shall pay for the use of the facilities and administrative support provided by CSU Pueblo through the Operating Account in accordance with and as provided in the Institute's annual budget. Payment for facilities and administrative support shall equal 10% of the revenue from the Marijuana Tax Cash Fund allocated by the Colorado Generally Assembly through the Long Bill to the Institute.

E. Termination of Relationship.

- 1. Either Party may opt out of their hosting arrangements by providing at least one fiscal year's notice to the other Party, and to the Joint Budget and Education Committees of the Colorado General Assembly, or any successor committees.
- 2. If either Party exercises the opt out of its hosting arrangements, the Governing Board shall conduct a search using national best practices and complete the transition in one fiscal year. CSU Pueblo shall continue to support the Governing Board and the Institute during the transition year, in accordance with the Institute's approved annual budget.
- 3. All property or assets currently owned or later developed or acquired by either Party shall remain the property of that Party. Such assets and property shall include, but not be limited to, intellectual property.
- 4. Notwithstanding the foregoing, the Parties may agree to enter into a license or similar agreement to transfer certain property including

intellectual property to the Governing Board, the Institute, or the new Host Institution upon termination of the Parties' relationship.

VI. NOTICE AND REPRESENTATIVES

Each individual identified below is the principal representative of the designated Party. All notices required to be given hereunder shall be hand delivered with receipt required or sent by certified or registered mail to such Party's principal representative at the address set forth below. In addition to, but not in lieu of a hard-copy notice, notice also may be sent by e-mail to the e-mail addresses, if any, set forth below. Either Party may from time to time designate by written notice substitute addresses or persons to whom such notices shall be sent. Unless otherwise provided herein, all notices shall be effective upon receipt.

VII. GENERAL TERMS

A. Applicable Law.

This Agreement shall be construed and enforced in accordance with the laws of Colorado. Nothing herein will require any Party to violate federal, state or local law or regulation.

B. Separability of Provisions.

Each provision of this Agreement shall be considered separable. To the extent that any provision of this Agreement is prohibited or ineffective under law, this Agreement shall be considered amended to the smallest degree possible in order to make the Agreement effective under law.

C. Section Titles.

Section titles are for descriptive purposes only and shall not control or alter the meaning of this Agreement as set forth in the text.

D. Amendments.

Except as otherwise specifically provided in this Agreement, this

Agreement may be amended or modified only by a writing approved the parties.

E. Entire Agreement.

This Agreement embodies the entire agreement and understanding between the parties with respect to the subject matter hereof and supersedes all prior agreements and understandings relating to such subject matter.

In witness of the forgoing, and intending to be legally bound hereto, the parties have entered into this Memorandum of Understanding as of this 23rd day of February, 2022

Governing Board of the Colorado Institute of Cannabis Research

By: L. Cinnamon Bidwell, PhD

Title: Chair, Institute of Cannabis

Research Governing Board

Date: 2/23/22

Director, Institute for Cannabis

Research

By: Chad Kinney

Title: Director Date: 03/01/22

The Board of Governors of the Colorado State University System, acting by and through Colorado State University Pueblo

By: Dr. Mohamed Abdelrahman

Title: Provost, CSU Pueblo Date: 03/01/22 03/23/22

Legal Sufficiency:

Johnna Doyle 03/18/202

By: Johnna Döyle

Title: Deputy General Counsel, CSU

Pueblo

Date: $\frac{03}{01/22}$

Agenda Item II.c.Budget Scenarios for \$1.8, 2.8, or 3.6 million. Most like the ICR will have a total appropriation of \$2.8 million for FY23.

A Starting Point for the FY23 Budget	Previous Year	\$1.8 Million FY23	\$2.8 Million FY23	\$3.6 Million FY23
CATEGORY	Dudger FV22	nagnna nagnna	D D D D D D D D D D D D D D D D D D D	EV 23
Journal	100.000	96.300	96.300	99.200
Conference		'	'	1
Staff Salary + Fringe	490,492	488,647	488,679	488,679
ICR Operating	40,000	39,068	40,127	42,500
Legal Services - AG	15,000	10,000	10,000	10,000
ICR Travel/PD	2,000	10,000	10,000	10,000
ICR Conducted Research	25,000	35,000	43,000	20,000
Continuing Research Projects	856,872	842,348	842,348	842,348
New Research Projects		•	000'006	1,600,000
Greenhouse	20,000			
Lobbying Support	25,000	30,000	30,000	30,000
Marketing/Communication/PR		20,000	20,000	25,000
Emerging Scientist Awards	29,000	20,000	20,000	000'09
Curricular Development		15,000	15,000	15,000
F&A	163,636	163,636	254,545	327,273
TOTAL	\$ 1,800,000	\$ 1,800,000	\$ 2,800,000	\$ 3,600,000
Appropriation	\$ 1,800,000	\$ 1,800,000	\$ 2,800,000	\$ 3,600,000

Agenda Item II.d.

One page Infographic



History

The Institute of Cannabis Research (ICR) at Colorado State University Pueblo was established in June 2016 and became the first multi-disciplinary cannabis research center at a regional, comprehensive institution. The passing of House Bill 19-1311 in 2019 created the governing board for the ICR to oversee the institute and approve its annual budget and clarified that the role of the ICR is to conduct or fund research related to cannabis and publicly disseminate the results of that research.

The Governing Board, in consultation with the ICR's Director must fund research through an open, competitive process using national best practice. Research sponsored by ICR funds on topics related to cannabis include clinical research, biotechnologies, clinical studies, the efficacies of medical marijuana, and economic development associated with cannabis in Colorado.

Current Research

The ICR's first statewide funding competition awarded 10 meritorious proposals from multiple Colorado Institutions, a selection of which is provided below:

Dr. Ken Olejar, CSU Pueblo: CBD and CBN Production and Increased Bioavailability

Cannabinoids produced by cannabis have garnered interest for potential medical use. This project will focus on the efficient production of the cannabinoid CBD and CBN (produced from CBD) along with analogues of these cannabinoids that will be tested for efficacy against a Rheumatoid arthritis model and in breast cancer. Research from this project may inform the future production and development of therapeutic applications of cannabinoids and their analogues.





Dr. Ashley Brooks-Russell, CU Anschutz: Observational Study of the Effects of Acute Cannabis Use on Ocular Activity Relevant to Driving

Police officers have long recognized that changes to the eyes, such as changes to the pupils or eye movements, can be a sign of recent drug use. Emerging research has found that changes to eye movement may indicate recent cannabis use and even impairment from cannabis. We will integrate eye-scanning technology into an existing driving simulator study to measure head position and eye movements while participants drive in a simulator after using cannabis. Successful completion of our research will inform future efforts to detect impairment related to cannabis while driving a vehicle or in an occupational setting.

Dr. Stephanie McGrath, CSU: Potential CBD Efficacy for Alzheimer's Disease

Alzheimer's disease (AD) and other dementias are expected to be the second leading cause of death in the United States within the next decade. Canine cognitive dysfunction syndrome (CCD) is a well-recognized neurodegenerative disease that serves as an ideal naturally occurring surrogate for AD in humans. Promising data have revealed that cannabidiol (CBD) and trazodone may have beneficial effects on various phases of the neuro-degenerative process, which will be tested alone and in combination, as a preventive and therapeutic option in dogs. The results of this in vivo study will set the foundation for human clinical trials.



Partnerships

Since 2016, the ICR has formed multiple partnerships and relationships with both local and national institutions dedicated to the purposes of conducting scholarly research on cannabis-related topics.

Vyripharm (2022)

Lambert Center, Global Hemp Thomas Jefferson Innovation Center, University Oregon State University **ICR** Chuncheon Volcani **Bioindustry** Research Foundation (CBF), Center, Israel South Korea Vyripharm Biopharmaceuticals, Houston, TX

Vyripharm Enterprises Inc will provide equipment and funds
to support the creation of a Comprehensive and Certification Testing Laboratory at
CSU Pueblo for the purposes of identifying cannabinoid content in a wide range of products.

- Hosts the annual Cannabis Research Conference, 2017-present
- **Activities**
- Co-Host the monthly Cannabis Research Webinar Series and Cannabis Cultivation Webinar Series
- Sponsors the publication of the Journal of Cannabis Research

"Effects of short-term environmental stresses on the onset of cannabinoid production in young immature flowers of industrial hemp (*Cannabis sativa* L.)." Park, SH., Pauli, C.S., Gostin, E.L. et al. (2022).

When common environmental stressors are applied to industrial hemp plants, the cannabinoid profiles of the plant's young flowers are altered, with <u>drought</u> conditions exhibiting the largest changes in cannabinoid production.

PTSDY

"Comparison of cannabidiol to citalopram in targeting fear memory in female mice." Montoya, Z.T., Uhernik, A.L. & Smith, J.P. (2020).

In female populations, CBD may provide a more comprehensive and therapeutic treatment for <u>PTSD</u> with less negative side effects compared to citalogram.