

MEMORANDUM OF UNDERSTANDING

Initial Participating Universities: The Florida International University Board of Trustees, the University of South Alabama, Texas A&M AgriLife Research, the Boston University Board of Trustees and Sam Houston State University.

This Memorandum of Understanding (MOU) is effective this **September 15, 2020** between the participating universities listed above, who intend to join together in a cooperative effort to support the Center for Advanced Research in Forensic Science (hereinafter referred to as "CENTER, or CARFS"). All of the universities mentioned above shall be hereinafter referred to collectively as "INSTITUTIONS, or SITES".

WHEREAS, the activities of the CENTER are funded by 1) the National Science Foundation and the National Institute of Justice (hereinafter referred to, respectively, as "NSF" and "NIJ") 2) Industrial Members (hereinafter referred to as "MEMBERS") and 3) other funds that may be received from time to time.

WHEREAS, INSTITUTIONS desire to formalize certain agreements between them with respect to the subject matter contained herein;

NOW THEREFORE, for and in consideration of the mutual promises and covenants herein contained and intending to be legally bound, INSTITUTIONS hereto agree as follows:

1. Center Governance

- a. The CENTER will be guided by a common set of By-laws (a copy of which is included as Attachment A). The By-laws incorporate a mechanism for their modification.
- b. The CENTER will share a common Industrial Advisory Board (IAB), which recommends policy and project funding for the CENTER.
- c. The CENTER Director provides overall administrative management of the CENTER.
- d. Each SITE shall have a SITE Director that provides overall administrative management of the SITE.
- e. The Academic Leadership Team is composed of the CENTER Director, SITE Directors and a representative from each Institution that is affiliated with any SITE within the CENTER.
- f. MEMBERS join the CENTER by executing the CARFS IUCRC Membership Agreement with a SITE.

2. Center Funding

Projects will be proposed to the IAB by SITE Directors at semiannual IAB meetings, and project funding allocations will be determined based on IAB project selection recommendations and Academic Leadership Team input as detailed in the CENTER By-laws. Each SITE will be responsible for collecting and administering membership dues from MEMBERS who are joining the CENTER through that SITE. Certification of MEMBER names and total fees paid by

MEMBERS shall be reported to NSF by each SITE, for the MEMBERS joining through that SITE.

3. Cross-Funding of Research

Each SITE shall collect fees from their respective MEMBERS. SITE Directors will use those fees to support CENTER research at their respective SITES and, when needed, at other SITES. The transfer of funds to support research projects that are based at other SITES shall be made by subcontract between the SITES. The SITE that collected the funds is permitted to collect an indirect cost (IDC) rate at a maximum of 5% of the transferred MEMBER funds, as defined within the subcontract. The SITE receiving the transferred funds is permitted to collect a maximum of 5% IDC rate of the transferred funds.

4. Ownership and Administration of Intellectual Property.

Intellectual Property (IP) shall be managed according to the terms of the existing CARFS IUCRC Membership Agreement, the CARFS By-laws and the guidance provided within the IUCRC solicitation.

5. Changes to this Memorandum of Understanding

The terms of this Memorandum of Understanding may be amended at any time by a written amendment executed by the authorized officers of all the parties to this MOU that are identified in the first paragraph above.

IN WITNESS WHEREOF, the parties hereto have caused this MOU to be duly executed by their duly authorized officers as of the day and year set forth next to each signature.

28th January 2021 *RMG*
Agreed, this ~~15th~~ day of ~~September~~, ~~2020~~

The Florida International University Board of Trustees
J.L

By: Roberto M. Gutierrez

Its: Assistant Vice President for Research

Agreed, this 15th day of September, 2020:

Sam Houston State University



By: Chad W. Hargrave, PhD

Its: Associate Vice President of Research and Sponsored Programs

Agreed, this 31st day of August, 2020:

Boston University

Todd Conley

By: Todd Conley

Its: Associate Director, Preaward Services

Agreed, this 20th day of January, 2020-2021

Texas A&M AgriLife Research

Stephen Schulze

By: Stephen schulze

Its: Assistant Vice Chancellor for Administration

Agreed, this 15th day of September, 2020:

University of South Alabama

Lynne Chronister

By: Lynne Chronister

Its: Vice President of Research & Economic Development

Attachment A

Article 1 – Name and Purpose

Section 1 – Name

The Center for Advanced Research in Forensic Science (“Center” or “CARFS”) is an Industry-University Cooperative Research Center (“IUCRC”) funded in part by the National Science Foundation (“NSF”) and the National Institute of Justice (“NIJ”). The Center is composed of Academic Institutions and Industrial Members.

Section 2 – Purpose

Vision Statement: The CARFS will be a collaborative research environment that involves government, private industry, and academic researchers to advance the field of forensic science practice through innovative research.

Mission Statement: The CARFS will advance the nation’s research infrastructure base by developing long-term partnerships among industry, academia, and government to address important challenges within the field of forensic science and to provide meaningful solutions to these problems.

Research Focus: Research topics of the CARFS will focus on the needs of the Industrial Members and the capabilities of the Academic Institutions in various areas of forensic science.

Article 2 – Membership Categories

Section 1 – Academic Institutions

An *Academic Institution* is any college, university, or institution of higher education that joins the Center, for purposes of participating in activities of the Center.

A *Site* is any Academic Institution that joins the Center by an award from NSF for purposes of participating in activities of the Center.

An *Affiliate Site* is any Academic Institution that joins the Center through subcontract to a Site for purposes of participating in activities of the Center. Affiliate Sites cannot subcontract with additional Affiliate Sites.

Section 2 – Industrial Members

An *Industrial Member* is any industrial firm or organization (including non-profits), or non-NSF federal agency that joins the Center, signed the CARFS Membership Agreement (or for federal agencies, executed an interagency agreement with NSF), and timely paid the annual membership fees. As defined below, any references to Industrial Members means both Full Industrial Members and Affiliate Industrial Members. Any reference to Full Industrial Members means only Full Industrial Members; any references to Affiliate Industrial Members means only Affiliate Industrial Members.

Full Industrial Members are defined as any Industrial Member who has paid at least a \$25,000 membership fee per year to support research at the Center. Full Industrial Members have voting privileges.

Affiliate Industrial Members are defined as any Industrial Member qualifying as a “Small Business” (according to the Federal Government definition) that joins as a non-voting member with a minimum contribution of \$5,000 per year. Affiliate Industrial Members do not have voting privileges.

Article 3 – Joining and Maintaining Membership in the Center

Section 1 – Academic Institutions

Academic Institutions, whether Sites or Affiliate Sites, will be added to the Center following the NSF IUCRC guidelines.

Academic Institutions may only join the Center through award of an IUCRC grant from NSF, with a minimum of two-thirds agreement among the existing Academic Site Directors and with simple majority agreement of the Center’s IAB.

Academic Institutions must sign the CARFS Memorandum of Understanding (“MOU”). This agreement among the Academic Institutions participating in the Center, describes how they will interact within the Center. It addresses sharing of administrative and managerial responsibilities, handling of the collection and allocation of membership fees after project selection, the arrangement for annual certification of the collected membership fees and sources, and intellectual property issues.

The CARFS MOU shall be posted on the public portion of the Center website.

Section 2 – Industrial Members

Companies, federal research and development organizations, government-owned or contractor-operated laboratories, small businesses, and related entities may request, or be requested, to join the Center as a Full or Affiliate Industrial Member at a Site or an Affiliate Site. State or local government agencies may also be eligible for membership.

Industrial Members join the Center through the CARFS Membership Agreement¹ executed with one of the Center’s member Academic Institutions. See Membership Agreement: <https://iucrc.nsf.gov/industry/joining-a-center/membership-agreement>.

Federal agencies have the option of joining the Center without signing the membership agreement, by entering into a Military Interdepartmental Purchase Request (MIPR) or Interagency Agreement (IAA) with NSF.

New Industrial Members may join the Center upon signature of the CARFS Membership Agreement (or for federal agency joining via MIPR/IAA, upon award of supplemental funds to an NSF site award), acceptance of the current bylaws, and payment of the applicable annual membership fees. Membership fees are non-refundable and will not be pro-rated for those Industrial Members that join the Center off cycle or terminate early.

Application of new or additional membership fees may be made at the Site or Affiliate Site to existing research programs or new interim proposals approved by the Center Leadership in consultation with the Industrial Advisory Board (IAB). Alternatively, these fees may be held in reserve for project funding until the next Center meeting.

New Industrial Members’ rights to continued funding and Intellectual Property are subject to the same provisions as existing members.

Article 4 – Center Governance

Section 1 – General

The Center shall be governed by:

- NSF IUCRC guidelines (<https://www.nsf.gov/pubs/2017/nsf17516/nsf17516.htm> and CARFS Membership Agreement);
- the Academic Leadership Team;

¹ The membership agreement requires that it be countersigned by an authorized representative of a Site or Affiliate Site.

- recommendations and advice of the Industrial Advisory Board; and
- a University Policy Committee for each Site.

Section 2 – Academic Leadership Team

The *Academic Leadership Team* is comprised of Site Directors from each Academic Institution member and a designated faculty member representing an Affiliate Site.

Site Directors are responsible for Center activities at their Site and will report directly to their respective university administrators and to the Center Director. Site Directors are appointed by their respective universities and are usually the Principal Investigators (“PIs”) of the IUCRC awards. Site Directors serve as liaisons between the Center and the researchers at the Academic Institutions.

The *Center Director* will be appointed by the Academic Leadership Team and will either be chosen from among the Site Directors or be an experienced faculty member from one of the Sites. The Center Director must have significant background and experience in the discipline of forensic science. The designated Center Director oversees all operating and management aspects of Center operations. The leadership at the Sites and Affiliate Sites will manage their respective university researchers and research projects and collaborate with each other within the Center. The Center Director will be advised by the Industrial Advisory Board.

An *Associate Director* will be appointed by the Academic Leadership Team and will either be chosen from among the Site Directors or be an experienced faculty member from one of the Sites. The Associate Director will represent the Center Director when the Center Director is unable to fulfill his or her duties.

Section 3 – Industrial Advisory Board (IAB)

A Full Industrial Member is entitled to have one representative on the IAB for every paid annual membership fee (\$25,000). Regardless of the number of representatives, a Full Industrial Member contributing two \$25,000 membership fees may choose to have two votes. Both votes may be placed in the hands of a single voting representative. A Full Industrial Member can pay more than \$50,000, but cannot have more than two votes.

All Industrial Members (Full Industrial Members and Affiliate Industrial Members) will participate through the IAB in the strategic planning of the Center.

The IAB will select a Committee consisting of a chair, vice-chair, and secretary for a two-year term. The IAB is advisory to the Center Director regarding project selection and other Center activities.

The IAB will assist the Center Director, Site Directors, and participating faculty in identifying pre-competitive, forensic science-related research problems; recommend (via a voting process) future research projects; identify appropriate internship opportunities for graduate students; assist the Center Director and Site Directors in identifying new members; review the research and educational accomplishments of the Center; and recommend restructuring and/or redirecting of ongoing programs to meet needs and concerns expressed by the IAB.

Section 4 – University Policy Committee

A University Policy Committee for each Site will be available to resolve administrative issues related to the operation of the Center. It will be comprised of individuals from the Academic Institution’s administration and will facilitate the operation of the Site or Affiliate Site, while ensuring compliance with the policies of their respective universities.

Each University Policy Committee will meet as necessary to discuss and resolve Center-related issues.

This Committee shall not have any overlap with members of the Academic Leadership Team.

Article 5 – Administration

The IAB and Academic Leadership Team will develop strategic plans for the Center, to include recruiting new Industrial Members and Academic Institutions to the Center.

The Center Director, in coordination with the Academic Leadership Team, with consideration of recommendations of the IAB, and in accordance with provisions of prevailing membership agreements, will authorize the use of membership fees by awarded project Principal Investigators in support of Center research.

Article 6 – Meetings

Section 1 – Center Meetings

The CARFS will meet during the semi-annual Industrial Advisory Board meetings; once in the fall and once in the spring. Meeting locations will be determined at the previous IAB meeting, or at least six months in advance. In extraordinary circumstances, as determined by the Center Director and the IAB, the semi-annual IAB meetings may be held remotely.

The Center Director, in consultation with the Academic Leadership Team and the IAB, will establish the schedule of activities and meetings for the Center including establishing the agenda for the semi-annual IAB meetings.

All Center projects and meetings are confidential and closed to the public. Attendance is limited to representatives of Industrial Member organizations that have paid the annual membership fees and signed a membership agreement or executed a MPIR/IAA with NSF before the meeting date and member Academic Institutions. Additional participants in Center meetings include, but are not limited to:

- Project Principal Investigators who manage specific research projects funded by the Center;
- Administrative support staff provided by the Academic Institutions to provide a reasonable level of clerical and accounting support for the operation of the Center; and
- An Evaluator to provide an independent assessment of the operation of the CARFS to the Center's NSF Program Officer, as per NSF guidelines.²

In the event a prospective member would like to attend, that organization or Academic Institution must sign a non-disclosure agreement (“NDA”), effective until expiration or termination, and will not participate in IAB voting.

Section 2 – IAB Meetings

The IAB shall meet twice annually (as per IUCRC guidelines) during the semi-annual IAB meeting to fulfill its responsibilities.

The closed session of the IAB meeting will be organized and led by the IAB Chair or appointed representative.

² The support of the NSF-appointed Assessment Coordinator is managed independently by NSF. Centers are required to provide all necessary data and materials to the Center Evaluator in a timely fashion, so that the Evaluator can fulfill his or her responsibilities.

At all meetings of the IAB, two-thirds of the Full Industrial Members of the IAB will constitute a quorum for the transaction of business.

All representatives of the Industrial Members may participate in discussions of all matters before the Board, but only the authorized representatives of Full Industrial Members may vote on issues before the IAB. In extraordinary circumstances, as determined by the Center Director and the IAB, these meetings may be held remotely.

Industrial Members are expected:

- to physically attend both semi-annual IAB meetings. Video or teleconference participation during project selection procedures is discouraged, but may be acceptable under extraordinary circumstances.
- to participate in the process of reviewing and recommending research to be funded; and
- to vote on research projects and other research matters before the IAB.

Article 7 – Research Project Selection and Progress Reports

Section 1 – Selection of Research Projects

Projects will be proposed to the IAB by Site Directors at the semiannual Center Meetings, and project funding allocations will be determined by the Center Director based on IAB project selection recommendations and input from the Academic Leadership Team. The Principal Investigators will be identified in the specific project proposals.

Industrial Members shall recommend projects by voting, based on the amount of their individual membership contribution, for their preferred projects, which may occur at one or more sites in the Center.

Where conflicts exist in matching voted allocation to project funding requirements, the Academic Leadership Team will work as a group and with the IAB to support IAB member needs at all Sites and to optimize the Center-wide impact of funding decisions.

Funds are defined as NSF funds provided to the Site, plus all funds (program income) provided by IAB members to Sites and Affiliate Sites. The Site Directors will control the funds at their Site. In the event a Principal Investigator changes institutions and the grant is transferred to another institution that joins CARFS, the new institution accepts all

responsibilities to follow all applicable NSF policies, including those that apply to remaining program income.

Section 2 – Project Progress Reports

Principal Investigators of awarded projects report directly to the appropriate Site Director and provide progress reports to the IAB. Progress reports will be offered to interested IAB members no less than once a quarter (e.g., in person at semi-annual IAB meeting, through scheduled project update meetings with interested IAB members and/ or through written reports).

Section 3 – Subcontracts

Sites and Affiliate Sites cannot subcontract with other Academic Institutions or third-parties to expend program income funds allocated to them for Center projects unless approved by the IAB. Notwithstanding any other language in this Agreement, however, nothing shall prevent a member Academic Institution from executing required subcontracts for expenditures of NSF funds or program income funds related to CARFS with other units within the same Academic Institution, or in the case of Texas A&M AgriLife Research ^[3], subcontracts with College Station based members of The Texas A&M University System.

Article 8 – Intellectual Property & Research Results

Intellectual property means any invention or discovery which is or may be patentable or otherwise protectable under the definition of intellectual property used by NSF at the time it was conceived or first actually reduced to practice as CARFS-funded research as required by the applicable IUCRC NSF guidelines in effect at the time of disclosure (hereinafter “Intellectual Property”). The rules and program guidelines of the NSF IUCRC Program and the membership agreement shall be followed with regard to the administration of Intellectual Property.

[3] For example, Texas A&M AgriLife Research and Texas A&M University are members of The Texas A&M University System.

Intellectual Property that results from CARFS-funded research shall be the exclusive property of the research Site or Affiliate Site whose researcher conceives or first actually reduces to practice said Intellectual Property.

The Principal Investigator who conceived or first actually reduced to practice the Intellectual Property shall submit an invention disclosure to the relevant department or office (i.e., Technology Transfer Office) associated with their Site or Affiliate Site. In conjunction with the Technology Transfer Office and/or university, the Principal Investigator will forward the invention disclosure to the Center Director, or his or her designee, who will then forward the disclosure to the currently paid Industrial Members who have a signed membership agreement on file with the CARFS (or executed a MIPR/IAA through NSF). All invention disclosures are to be considered confidential, shall not be shared with third parties, and shall be limited to the use of Industrial Members, in good standing for the related project funding year, in assessing the licensing opportunity.

Industrial Members in good standing for the related project funding year shall have 90 days from receipt of an invention disclosure to notify the disclosing Site or Affiliate Site of the member's desire to enter into a non-exclusive royalty-free license.

The entitlement of Industrial Members to Intellectual Property is contingent upon having an active membership at the time of the invention disclosure. Industrial Members who join the Center after a disclosure has been filed are not eligible to the same rights as those who were active in the CARFS program year at the time of the invention disclosure. This also applies to Industrial Members whose membership has lapsed and rejoin the Center at a later date. Likewise, Industrial Members who terminate their membership prior to the end of the membership year waive their rights to Intellectual Property, and any right of notice of invention disclosures and publications.

Intellectual Property is the confidential information of the disclosing party. Industrial Members that sign the membership agreement (or execute MIPR/IAA through NSF) agree not to disclose or share any Intellectual Property to non-members outside the Center without written permission from the Center Director and the execution of an NDA of the receiving entity with CARFS.

“Research Results” include but are not limited to CARFS’ summaries, proposals, presentations, recordings, final reports, underlying data and related CARFS project materials. Research Results are confidential and cannot be disclosed without permission of the Academic Institution generating them. Industrial Members that sign the

membership agreement (or execute MIPR/IAA through NSF) agree not to disclose or share any Research Results to third parties without written permission from the Center Director and prior approval by the Site or Affiliate Site that owns the Research Results. The Site or Affiliate Site has the right to require the Industrial Members to execute a non-disclosure agreement (“NDA”) with the intended receiving entity. In such case, Industrial Members who enter into an NDA shall provide a copy of that NDA to the Site or Affiliate Site whose Research Results are being shared. Any further disclosure by Recipients of Research Results shall be subject to the same requirements.

Recipients of confidential information shared pursuant to these bylaws shall only disclose confidential information as permitted under these bylaws; confidential information should not be used outside of CARFS or shared or disclosed with third parties.

Article 9 – Amendments

The bylaws of the Center may be amended at any time by an affirmative vote of the Academic Leadership Team, with the consent of two-thirds of the IAB.

Article 10 – Hierarchy of Operational Documents

The bylaws of the Center are subordinate to the IUCRC program guidelines for operating an IUCRC (including relevant NSF solicitation) and if a conflict is identified, the IUCRC guidelines shall be followed. The Center bylaws are similarly subordinate to the CARFS membership agreement and MOU, and if a conflict is identified, the CARFS membership agreement and MOU shall be followed.