MEMORANDUM OF UNDERSTANDING BETWEEN CHRISTOPHER NEWPORT UNIVERSITY AND VIRGINIA COMMONWEALTH UNIVERSITY REGARDING RECIPROCAL ACCESS TO SHARED RESOURCES

BACKGROUND

This Memorandum of Understanding ("MOU") is entered into by and between Virginia Commonwealth University and Christopher Newport University (individually an "Institution" and collectively, the "Institutions"). The Institutions seek to enhance collaboration, cooperation and interaction between institutions of higher education within the Commonwealth of Virginia in a manner that effectively and efficiently uses existing resources at each Institution. The Institutions believe that such collaboration will be facilitated by execution of this MOU.

The Institutions have individually made significant investments to acquire specialized equipment and establish unique research cores supporting basic and clinical research. To further enhance the availability of these existing resources, the Institutions seek to share, in an economical manner, specialized technical services and access to equipment and expertise for research purposes.

This MOU sets forth the understanding of the Institutions concerning reciprocal access to shared resources. The purpose of the MOU is to document (a) the intent of each Institution to provide reasonable access, as capacity will permit, to specifically enumerated shared resources and (b) the policies and conditions governing such access. For purposes of this MOU, "Shared Resources" means the research equipment and expertise, cores, facilities and/or services specifically identified by an Institution that shall be made available to the other Institutions pursuant to this MOU.

I. General Understanding:

A. The Institutions shall cooperate in good faith to encourage access to each Institution's respective Shared Resources, for research purposes. Pursuant to the MOU, an Institution may designate investigators as those faculty members of an Institution who seek to use Shared Resources in support of research ("Investigators").

   1. Each Investigator must be a member in good standing at his/her respective Institution. Each Institution shall appoint a Shared Resource Director who will serve as an Institutional point of contact for requests to use Shared Resources.
2. Investigators desiring to use a Shared Resource at another Institution must first contact the responsible individual or Shared Resource Director at the other Institution to confirm availability of access and learn of any specific policies governing access. Once this is done, the point of contact at both Institutions should be notified that samples and/or data will be sent and to arrange for billing information to be provided.

3. Fees charged to an Institution by another Institution shall equal the fees charged to the Investigators at their own Institution for internally funded activity. Further, the fees charged shall not be calculated in a manner that includes any expense properly allocated as an indirect cost in accordance with the providing Institution’s indirect cost rate agreement.

4. Each Institution shall invoice for use of a Shared Resource as requested by each Investigator, and shall provide appropriate billing information to the Investigator before the Shared Resource is provided, as set forth in this MOU.

5. The Institutions shall review performance under this MOU biannually, and based on such review shall propose appropriate amendments to the MOU, including but not limited to soliciting other higher education institutions within the Commonwealth of Virginia to become signatories to this MOU. Any amendments to this MOU shall be binding as to an Institution only upon the execution of such amendment by a duly authorized signatory of the Institution.

B. Each Institution shall give priority for use of Shared Resources to Investigators at their home Institution. An Investigator at an Institution wishing to use a Shared Resource at another Institution may do so on an 'as available' basis. Investigators shall have priority for Shared Resource access at their home Institution. As availability permits, Investigators shall have access to the Shared Resources of other Institutions. In special recognition of the frequently irreplaceable nature of samples housed within a Shared Resource primarily concerned with acquisition and distribution of clinical tissue samples (i.e., a biorepository), access to tissue samples from an Institution will require a determination by the respective scientific director of such resources at such Institution that granting access will not disruptively impact the potential future needs of investigators at the home Institution.
C. This MOU extends to the Shared Resources at the respective Institutions as indicated on Exhibit B.

II. Term; Renewal; Termination

A. This MOU shall be effective as of 1 November 2020 (the "Effective Date"), and shall remain in full force and effect until the 5th anniversary of the Effective Date, unless terminated earlier in accordance with this MOU.

B. An Institution may terminate this MOU at will solely with respect to such Institution by providing 60 days advance written notice to the other Institutions.

III. Administration:

A. Investigators who seek to use a Shared Resource shall contact the specific Shared Resource Director or Administrator at their home Institution as set forth on Exhibit A attached hereto. Before services are provided, the ordering Institution will provide order information to the supplying Institution. The point of contact at the supplying Institution will be responsible for submitting an invoice for payment for services provided to Investigators and for providing copies of the invoices to the point of contact at the ordering Institution. Shared Resource Directors will keep a log of all reciprocal users. Shared Resource Directors will submit a monthly report to the Shared Resource Directors who oversee all Shared Resources at their respective Institutions.

B. Each Institution will have an oversight committee to review usage capacity. If an Institution determines, in its sole discretion, that another Institution is making excessive use of Shared Resources, that Institution shall notify the relevant Administrator and the two Institutions shall work in good faith to reach an understanding about future usage of Shared Resources. Such understanding may include a temporary or permanent moratorium on such usage of Shared Resources. If the relevant Institutions cannot reach an understanding, the Institution providing the Shared Resources may terminate this MOU with respect to the relevant Institution only, and/or with respect to specific Shared Resources. Such termination of access
rights shall be made in a writing delivered to the Administrator of the Institution being denied access rights.

C. Investigators from the Institutions will be invited to attend annual Shared Resource Retreats to be held at times and locations to be mutually agreed upon by the Institutions.

IV. Intellectual Property:

A. Except in making the Shared Resources known to faculty, no Institution may use the other Institutions’ names, logos or marks, or any derivative thereof, without the prior written permission of the Institution whose name, logo or marks, or derivative thereof, are proposed to be used.

B. Ownership and other rights in and to intellectual property of the Institutions shall not be affected by this MOU. The Institutions intend for ownership of intellectual property rights to vest in the employer of the individual inventors and/or authors according to the intellectual property policy of the Investigator’s institution. Unless otherwise agreed to in a writing signed by duly authorized representatives of an Institution, mere usage of a Shared Resource shall not entitle the provider of the Shared Resource to any ownership or usage rights of intellectual property belonging to another Institution.

C. All right, title and interest in and to any data generated by the provider of the Shared Resources in performance of work for another Institution shall vest exclusively in the Institution paying for such Shared Resources (the “Requesting Institution”). Unless otherwise expressly agreed to by the Requesting Institution, any data generated by the provider of the Shared Resources as a result of performing work for the Requesting Institution shall not be retained by the provider Institution, but shall instead either be sent to the Requesting Institution or destroyed per the instructions of the Requesting Institution.

V. Liability and Insurance:

A. No Institution is, by virtue of this MOU, the agent of any of the other parties to this MOU, and no Institution shall be liable for the wrongful acts or negligence of the other parties to this MOU. Each Institution understands that use of the other Institutions’ Shared Resources may involve exposure to potentially hazardous conditions.
B. Each Institution shall maintain its own insurance as deemed necessary and appropriate for its operations and the Shared Resources.

C. IN NO EVENT SHALL ANY PARTY TO THIS MOU BE LIABLE TO ANOTHER PARTY HERETO FOR INCIDENTAL, SPECIAL, INDIRECT, LOST PROFITS, LOST REVENUE, LOST OPPORTUNITY OR CONSEQUENTIAL LOSS, DAMAGE OR EXPENSE ARISING FROM OR IN RELATION TO THIS MOU.

VI. Confidentiality:

A. Each Institution agrees not to disclose, to any third party or to use, directly or indirectly, for a period of five years after disclosure, any proprietary and confidential research data, or other similar information of which the Institution may become aware as a result of using Shared Resources of the other Institutions, or as a result of having other institutions use its Shared Resources. For the avoidance of doubt, such information shall be marked "confidential" and "proprietary" at the time of disclosure.

B. Notwithstanding the preceding provision, the obligations of the Institution receiving confidential information (the "Receiving Institution") from another Institution do not include: (i) information that, at the time of disclosure, was published, known publicly, or otherwise in the public domain; (ii) information that, after disclosure, is published, becomes known publicly, or otherwise becomes part of the public domain through no fault of the Receiving Institution; (iii) information that, prior to the time of disclosure, is known to the Receiving Institution as evidenced by its written records and is not then subject to an obligation of confidentiality to any third party; (iv) information that, after disclosure, is made available to the Receiving Institution in good faith by a third party under no obligation of confidentiality and without restriction on its further disclosure by the Receiving Institution; or (v) information that is subject to laws which require its disclosure.

VII. Conduct Compliance:

A. Each Institution shall require all employees, agents and students (if applicable) who use Shared Resources provided under this MOU to observe all applicable policies, rules and regulations of the Institution providing the Shared Resources.
B. Each Institution shall comply with all applicable laws and legal requirements in connection with the activities contemplated by this MOU.

C. This MOU shall be governed in all respects by the laws of the Commonwealth of Virginia without regard to its rules regarding conflict of laws. Any action to enforce the obligations of this Agreement shall be brought and maintained exclusively in the state courts of the Commonwealth of Virginia.

[Signature Page and Exhibits Follow]
EXHIBIT A

Shared Resource Directors for each Institution:

**Virginia Commonwealth University**
Paul Fawcett, Ph.D.
Assistant Professor of Internal Medicine and
Director of Research Infrastructure
paul.fawcett@vcuhealth.org
(804) 827-0975

**Christopher Newport University**

Geoffrey Klein, Ph.D.
Vice Provost
geoffrey.klein@cnu.edu
(757) 594-7477


**EXHIBIT B**

**VCU Shared Resources:**
- Center for Molecular Imaging ([https://molecularimaging.vcu.edu/](https://molecularimaging.vcu.edu/))
- Chemical and Proteomic Mass Spectrometry Core Facility ([https://chemistry.vcu.edu/research/facilities/chemical-and-proteomic-mass-spectrometry-core-facility/](https://chemistry.vcu.edu/research/facilities/chemical-and-proteomic-mass-spectrometry-core-facility/))
- Cancer Mouse Models Core ([https://massey.vcu.edu/research/cores/cmmc/](https://massey.vcu.edu/research/cores/cmmc/))
- Flow Cytometry Core facility ([https://massey.vcu.edu/research/cores/flow-cytometry/](https://massey.vcu.edu/research/cores/flow-cytometry/))
- Lipidomics & Metabolomics Core Facility ([https://massey.vcu.edu/research/cores/lipidomics/](https://massey.vcu.edu/research/cores/lipidomics/))
- Microscopy Core Facility ([https://massey.vcu.edu/research/cores/msr/](https://massey.vcu.edu/research/cores/msr/))
- Nanomaterials Characterization Core Facility: ([https://nano.vcu.edu/](https://nano.vcu.edu/))
- Genomics Core Facility ([https://genomics.vcu.edu](https://genomics.vcu.edu))
- Structural Biology Core Facility ([https://lsb3d.pharmacy.vcu.edu/resources/](https://lsb3d.pharmacy.vcu.edu/resources/))
- Tissue and Data Acquisition and Analysis Core Facility ([https://www.massey.vcu.edu/research/cores/tdaac/](https://www.massey.vcu.edu/research/cores/tdaac/))
- Transgenic and Knock-out Mouse Core Facility ([https://www.massey.vcu.edu/research/cores/tmf/](https://www.massey.vcu.edu/research/cores/tmf/))

**CNU Shared Resources:**

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<thead>
<tr>
<th>Spectroscopy Instrumentation Cluster</th>
<th>Make</th>
<th>Model</th>
<th>Accessories</th>
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<tbody>
<tr>
<td>400 MHz NMR</td>
<td>IEOL</td>
<td>400 YH</td>
<td>Autosampler</td>
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<td>ICP-OES</td>
<td>Shimadzu</td>
<td>ICPE-9810</td>
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<td>FT-IR</td>
<td>Shimadzu</td>
<td>IR Tracer-100</td>
<td>QATR 10</td>
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<td>X-Ray Spectrometer</td>
<td>Bruker AXS GmbH</td>
<td>S4 Pioneer</td>
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<td>X-Ray Diffractometer</td>
<td>Rigaku</td>
<td>Miniflex II</td>
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<td>UV-VIS Spectrophotometer</td>
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<tr>
<th>Chromatography Instrumentation Cluster</th>
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<td>Organic Elemental Analyzer</td>
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<td>Flash 2000</td>
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<td>HPLC</td>
<td>Shimadzu</td>
<td>LC-40</td>
<td>Autosampler, Photodiode Array Detector, Conductivity Detector</td>
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<tr>
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<tr>
<td>Instrument</td>
<td>Make</td>
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<td>LC-MS</td>
<td>Thermofisher</td>
<td>Ultimate 3000/LCQ-Fleet</td>
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<td>GC-MS</td>
<td>Shimadzu</td>
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**Miscellaneous Instrumentation Cluster**

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<th>Model</th>
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<tbody>
<tr>
<td>Surface Area and Porosity analyzer</td>
<td>IEOL</td>
<td>ASAP 2020</td>
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<td>Thermal Analyzer</td>
<td>NETZCH</td>
<td>T6 209 F Tarsus</td>
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<td>Differential Scanning Calorimeter</td>
<td>Shimadzu</td>
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**Neuroscience Equipment**

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<tr>
<td>EEG</td>
<td>Cortech Solutions</td>
<td>ActiveTwo System</td>
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<td>Eye Tracking</td>
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