

COLLABORATION AGREEMENT

between

The University of Birmingham

and

Aston University

and

Universidad de la Republica

COLLABORATION AGREEMENT

between

THE UNIVERSITY OF BIRMINGHAM, a charitable body registered in England under registration number RC000645 incorporated under Royal Charter and having its main administrative offices at Edgbaston, Birmingham, B15 2TT, UK (the “Lead”)

and

ASTON UNIVERSITY an exempt charity with registration number RC000904 and having its main administrative offices at Aston Triangle, Birmingham B4 7ET, UK (“Aston”)

and

UNIVERSIDAD DE LA REPUBLICA, having its main administrative offices at Avenida 18 de Julio 1824, 2o piso, Montevideo, Montevideo, Uruguay (“UdelaR”)

hereinafter referred to as the “Parties” and each of them being a “Party”)

In this Agreement Aston, and UdelaR shall together be referred to as the “Collaborator(s)”

BACKGROUND

With reference to the project entitled “*Deep Learning-based Segmentation Method For Detecting Mandibular Canal In 3D Computed Tomography (CT) Images*”, (the “Project”), the Parties hereby confirm their intention to regulate their rights and obligations in accordance with the terms and conditions contained in this agreement (the “Agreement”).

TERMS AND CONDITIONS

It is hereby agreed as follows:

1. The Project

- 1.1. The Parties will each use their reasonable endeavours to collaborate on the Project as described in the allocated work as set out in Schedule 1 (“Allocated Work”).
- 1.2. The Project shall commence on 22nd August 2022 and shall continue until 22nd August 2026. The term of this Agreement may be extended by the mutual written agreement of both Parties signed by their authorised signatories.
- 1.3. Gabriel Landini of the Lead is designated the Project Leader and shall have overall responsibility for management of the Project.
- 1.4. Any variation to this Agreement shall be in writing and signed by authorised signatories for each Party.

2. Intellectual Property

- 2.1. In this Agreement, “Intellectual Property” shall mean intellectual property of any description including but not limited to all inventions, designs, information, specifications, formulae, improvements, discoveries, know-how, data, processes, methods, techniques and the intellectual property rights therein, including but not limited to, patents,

copyrights, database rights, design rights (registered and unregistered), trademarks, trade names and service marks, and applications for any of the above.

- 2.2. All Intellectual Property used in connection with the Project which has been generated prior to or outside the scope of the Project ("Background IP") shall remain the property of the Party contributing the same. The Parties agree that any improvements or modifications to a Party's Background IP arising from the Project which are not severable from that Background IP will be deemed to form part of that Party's Background IP and be owned by that Party. Each Party acknowledges and confirms that nothing contained in this Agreement shall give it any right, title or interest in or to the Background IP of the other Parties save as granted by this Agreement.
- 2.3. "Results" shall mean all information, know-how, results, inventions, software and other Intellectual Property arising in the course of the Project. Subject to clause 2.4, each Party shall own the Results generated by its employees, students and/or agents arising from work on the Project.
- 2.4. Any Results which are generated by two or more Parties jointly and for which it is impossible to segregate each Party's intellectual contribution to the creation of such Results shall be referred to in this Agreement as "Joint Results". Joint Results shall be jointly owned by those Parties who have generated such Joint Results (the "Joint Owners") in proportion to the respective contribution of each Party. The Joint Owners shall all participate in the preparation, filing, prosecution and maintenance of the Joint Results using patent counsel reasonably acceptable to all Joint Owners. Any Joint Owner of any of the Joint Results may commercially exploit the Joint Results upon consultation and agreement with the other Joint Owners. In such circumstances, the Party which is commercially exploiting the Joint Results will pay the other Joint Owners a fair and reasonable royalty rate/revenue on the value of any products or processes commercially exploited by it which incorporate any Joint Results taking into consideration the respective financial and technical contributions of the Joint Owners to the development of the Joint Results, the expenses incurred in securing intellectual property protection thereof and the costs of its commercial exploitation and the proportionate value of the Results in any such product or process.
- 2.5. Each Party grants the other Parties, subject to the restrictions in Clause 3, (i) a non-exclusive, non-transferable, non-sub-licensable, royalty-free licence for the duration of the Project to use its Background IP (provided it is free to license the Background IP in question) solely to enable the other Parties to carry out their respective part of the Project, and (ii) a non-exclusive, non-transferable, non-sub-licensable, royalty-free licence to use its Results for academic and non-commercial research purposes, including research projects funded by third parties (including commercial entities) provided that those parties gain or claim no rights to such Results.
- 2.6. If any Party (the "Exercising Party") requires the use of Background IP of any other (the "Other Party") in order to exercise its rights in the Results (whether solely or jointly owned) then, provided the Other Party is free to license the Background IP in question, the Other Party will not unreasonably refuse to grant or delay granting a licence to the Exercising Party so that the Exercising Party may use such Background IP for the purpose of exercising its rights in the Results.

3. Confidentiality

- 3.1. Subject to the remainder of this clause 3 and clause 4 below, the Parties each agree to use reasonable endeavours to keep confidential and not to publish or disclose in any way other than to those of its employees, students, directors, officers, advisors or representatives who have a need to know such information for the purposes of the Project:

- (i) any Background IP of another Party identified as confidential at the time of disclosure; or
- (ii) any Results of another Party; or
- (iii) Joint Results

(together the “**Confidential Information**”)

without the consent of the Party owning or controlling such Confidential Information for a period of 3 years from the conclusion of the Project.

3.2. The undertaking in clause 3.1 above shall not apply to information:

- 3.2.1. which, at the time of disclosure, has already been published or is otherwise in the public domain other than through breach of the terms of this Agreement;
- 3.2.2. which, after disclosure to a Party, is subsequently published or comes into the public domain by means other than an action or omission on the part of any Party;
- 3.2.3. which a Party can demonstrate was known to it or subsequently independently developed by it and not acquired as a result of participation in the Project;
- 3.2.4. lawfully acquired from a third party who did not obtain it from any Party hereto;
- 3.2.5. is required to be disclosed to any regulatory authority or court of competent jurisdiction, or which is required to be disclosed pursuant to a request under the Freedom of information Act 2000, the Freedom of Information (Scotland) Act 2002, Environmental Information Regulations 2004 or Environmental Information (Scotland) Regulations 2004.

4. Publications

- 4.1. This Agreement shall not prevent or hinder registered students of any Party from submitting for degrees of that Party theses based on results obtained during the course of work undertaken as part of the Project; or from following that Party’s procedures for examinations and for admission to postgraduate degree status.
- 4.2. In accordance with normal academic practice, all employees, students, agents or appointees of the Parties (including those who work on the Project) shall be permitted in pursuance of the Parties’ academic functions, to discuss work undertaken as part of the Project in internal seminars and to give instruction within their organisation on questions related to such work.
- 4.3. Notwithstanding Clause 3 above, each Party shall be entitled to publish articles directly arising from its solely owned Results. Prior to the publication of articles directly arising from the work of more than one Party on the Project, each Party shall endeavour to circulate proposed publications at least 30 days in advance of submission for publication. All publications shall acknowledge the contributions made by each Party. Each Party retains the right to request (such request not to be unreasonably refused) the delay of a publication in order to seek Intellectual Property protection for Results generated in the course of the Project if publication would reasonably prejudice such protection. Such delay shall not exceed 3 months, unless mutually agreed between the relevant Parties. Notification of the requirement for delay in submission for publication must be received by the publishing Party within thirty (30) days after the receipt of the material by the other Party/Parties, failing which the publishing Party shall be free to assume that the other

Party/Parties has no objection to the proposed publication. The provisions of this sub-clause 4.3 shall survive termination or expiry of this Agreement for the period of one year.

- 4.4. No Party shall use the name or any trademark or logo of any other Party or the name of any of its staff or students in any press release or product advertising, or for any other commercial purpose, without the prior written consent of the Party(s).

5. Termination

- 5.1. The Lead may terminate a Party's participation in the Project upon written notice on the occurrence of any of the following events:
- 5.1.1. the Party enters into bankruptcy or liquidation or any other arrangement for the benefit of its creditors; or
 - 5.1.2. the Party is in material breach of any of its obligations hereunder and such breach is not capable of remedy; or
 - 5.1.3. the Party is in material breach of any of its obligations hereunder and such breach is capable of remedy but the Party remains in breach on the expiry of twenty eight (28) calendar days after receipt by the Party from the Lead of written notice specifying the breach and the action reasonably required to remedy the same.
- 5.2. A Party may terminate its participation in the Project by giving ninety (90) days prior written notice to the Lead of its intention to terminate on the occurrence of any of the following events:
- 5.2.1. another Party enters into bankruptcy or liquidation or any other arrangement for the benefit of its creditors; or
 - 5.2.2. another Party is in material breach of any of its obligations hereunder and such breach is not capable of remedy; or
 - 5.2.3. another Party is in material breach of any of its obligations hereunder and such breach is capable of remedy but the Party remains in breach on the expiry of the ninety (90) day notice period (unless the Party involved begins to remedy the breach within that period, and then continues diligently to remedy the breach until it is remedied fully, in which case the termination shall not be effective).
- 5.3. In the event that the duration of the Project is extended in accordance with Clause 1.2 and a Party no longer wishes to participate in the Project for the period of the extension, the Party may terminate its participation in the Project upon written notice to take effect on the original end date of the Project.
- 5.4. For the purposes of this Agreement, a Party which terminates its participation in the Project or which has its participation terminated in the Project is defined as the "Leaving Party".
- 5.5. In the event of a Party terminating its participation in the Project, the Lead in collaboration with the other Parties will make reasonable attempts to reallocate the obligations of the Leaving Party under this Agreement to another existing Party or a new Party acceptable to the remaining Parties to this Agreement provided that such Party agrees to be bound by the terms of this Agreement.

- 5.6. Rights granted to the other Parties in respect of the Leaving Party's Background IP shall continue for the duration of the Project solely for the purposes of carrying out the Project, subject to the restrictions contained in this Agreement.
- 5.7. To the extent that exploitation of any other Party's/Parties' Results is dependent upon the Leaving Party's Background IP, then the Leaving Party shall, to the extent that it is free to do so, grant to the other Party/Parties a non-exclusive licence to such Background IP on fair and reasonable terms to be agreed;
- 5.8. The Leaving Party shall grant to the other Parties a non-exclusive, royalty-free licence to use its Results for the purposes of carrying out the Project.
- 5.9. All rights acquired by the Leaving Party to the Background IP and Results of the other Parties shall cease immediately other than in respect of the Leaving Party's interest in any Joint Results.
- 5.10. Clauses 2 (Intellectual Property), 5 (Termination), 6 (Liability), 7 (Transfer of Materials), 8 (Applicable Law), 9 (Anti-bribery), 10 (Impact), 11 (Research Misconduct), 15 (Third Party Rights), 19 (Dispute Resolution), 20 (Law), shall survive the expiration or termination (if earlier) of this Agreement indefinitely. Clause 3 (Confidentiality) shall survive expiration or termination (if earlier) of this Agreement for a period of 3 years. Clause 4.3 (Publications) shall survive expiration or termination (if earlier) of this Agreement for a period of one year.

6. Liability

- 6.1. No Party makes any representation or warranty in relation to the Results. No Party accepts any responsibility for any use which may be made of any work carried out under or pursuant to this Agreement, or of the Results, nor for any reliance which may be placed on such work or Results, nor for advice or information given in connection with them.
- 6.2. No Party makes any representation or warranty that advice or information given by any of its employees, students, agents or appointees who work on the Project, or the content or use of any materials, works or information provided in connection with the Project, will not constitute or result in infringement of third-party rights.
- 6.3. The maximum liability of a Party under this Agreement shall not exceed £50,000.
- 6.4. The liability of a Party shall not extend to loss of profit, revenue, business opportunity or any other indirect or consequential loss or damage.
- 6.5. Nothing in this Agreement limits or excludes any Party's liability for:
 - 6.5.1. death or personal injury resulting from negligence; or
 - 6.5.2. any fraud or for any sort of other liability which, by law, cannot be limited or excluded.

7. Transfer of Materials

- 7.1. In the event that any information or materials being shared by a transferring Party ("Transferor") to a receiving Party ("Transferee") under this Agreement is subject to any additional regulations due to its level of sensitivity including, without limitation, data protection, human tissue or export control legislation, the Parties agree to handle such information or materials in an appropriate and legally compliant manner.

- 7.2. The Transferor shall notify the receiving Transferee of any such sensitivity prior to transfer.
- 7.3. The Transferee shall procure that it obtains and shall comply with and maintain any necessary consent, approvals or licences in advance of taking receipt of such information or materials.
- 7.4. The Transferee undertakes to the Transferor:
- (a) to use the Material (as defined in Schedule 2) solely for the Project as set out in Schedule 1;
 - (b) to restrict access to the Material to those staff and students comprising the Transferee's research team, and to ensure that those staff and students are aware of and comply with the terms of this Agreement;
 - (c) to keep the Material confidential and not sub-license, transfer, disclose or otherwise make available the Material in whole or part to any third party except with specific prior written consent from the Transferor;
 - (d) to keep the Material secure by implementing organisational and technological measures appropriate to the nature and sensitivity of the data to prevent the unauthorised or accidental access, use or disclosure of the Material;
 - (e) to notify the Transferor as soon as reasonably practicable after becoming aware of any unauthorised or accidental access, use or disclosure of the Material, and to co-operate with any investigation made by the Transferor in connection with the unauthorised or accidental access, use or disclosure of the Material; and
 - (f) to permanently delete all copies of the Material from its hard drives and movable media and destroy all physical copies of the Material as soon as reasonably practicable on completion of the Project or on termination of this Agreement (if earlier).
- 7.5. For the avoidance of doubt, nothing in this Agreement purports to permit any Party to reverse engineer or otherwise analyse any of the Materials provided to it under this Agreement except in accordance with the provisions of this Agreement and to the extent applicable by law.

8. Applicable Laws

The Parties shall procure that in carrying out the Project, they will comply with all applicable laws, regulations and statutes, including those relating to modern slavery and anti-bribery. Non-compliance with this clause by one Party shall not be sufficient justification for non-compliance with the rest of the Agreement by the other Party(s).

9. Anti-Bribery

9.1. Each Party shall:

- 9.1.1. comply with all applicable laws relating to anti-bribery and anti-corruption (the "Relevant Requirements"), including the Bribery Act 2010, in connection with its conduct under this Agreement;
- 9.1.2. have and shall maintain in place throughout the term of the Agreement its own policies and procedures, including Adequate Procedures (as defined in section 7(2) of the Bribery Act 2010 and any guidance issued under section 9 of that

Act) under the Relevant Requirements, to ensure compliance with the Relevant Requirements and will enforce them where appropriate; and

9.1.3. promptly report to the other Party any request or demand for any undue financial or other advantage of any kind received by it in connection with this Agreement.

9.2. Each Party shall ensure that any Associated Person (as defined in section 8 of the Bribery Act 2010) who it involves in the performance of any obligations under this Agreement and/or the provision of support services does so only on the basis of a written agreement which imposes on and secures from such Associated Person terms equivalent to those imposed on the Parties under this Clause 9. The Parties shall be responsible for the observance and performance by such Associated Persons of such terms, and shall be liable to the other Parties for any breach by such Associated Persons of any such terms.

9.3. The Parties acknowledge and agree that any breach of this Clause 9 (however trivial) shall be deemed to be an irremediable material breach of this Agreement for the purposes of Clause 5.1.2 and 5.2.2.

10. Impact

The Parties acknowledge that each Party to this Agreement is required by its funders to demonstrate its impact and all Parties agree to comply with all reasonable requests made by the other Parties to provide such information (not including Confidential Information) as the Parties may reasonably require to address requirements placed on them. Such information may include (in relation to the Project), but shall not be limited to, effects, changes or benefits to the economy, society, public policy or services, health and the environment.

11. Research Misconduct

Each Party shall ensure that it has well defined arrangements for investigating and resolving allegations of research misconduct. Where an allegation of research misconduct arises in respect of an individual Party's participation in the Project and leads to a subsequent formal investigation, the relevant Party shall inform the Lead of the investigation and its outcome. Where an allegation of research misconduct arises in respect of several Parties' participation in the Project, the relevant Parties will work together to determine how the allegation will be investigated and reported.

12. Force Majeure

12.1. A Party shall not be liable for failure to perform its obligations under this Agreement, nor be liable to any claim for compensation or damages, nor be deemed to be in breach of this Agreement, if such failure arises from an occurrence or circumstances beyond the reasonable control of that Party (excluding an obligation to make payment).

12.2. If a Party affected by such an occurrence causes a delay of three (3) months or more, and if such delay may reasonably be anticipated to continue, then the Parties shall, discuss whether continuation of the Project is viable, or whether the Project and this Agreement should be terminated.

13. No assignment

No Party will assign this Agreement without the prior written consent of the other Parties, such consent not to be unreasonably withheld, denied or delayed.

14. No Partnership

Nothing in this Agreement shall create, imply or evidence any partnership or joint venture between the Parties or the relationship between them of principal and agent.

15. Third Party Rights

Except as otherwise expressly provided for herein, the Parties confirm that nothing in this Agreement shall confer or purport to confer on any third party any benefit or any right to enforce any term of this Agreement for the purposes of the Contracts (Rights of Third Parties) Act 1999.

16. Waiver

16.1. No failure or delay by a Party to exercise any right or remedy provided under this Agreement or by law shall constitute a waiver of that or any other right or remedy, nor shall it preclude or restrict the further exercise of that or any other right or remedy.

16.2. No single or partial waiver of any right or remedy provided under this Agreement shall preclude or restrict the further exercise of that or any other right or remedy.

17. Severability

If any one or more clauses or sub-clauses of this Agreement would result in this Agreement being prohibited pursuant to any applicable law then it or they shall be deemed to be omitted. The Parties shall uphold the remainder of this Agreement, and shall negotiate an amendment which, as far as legally feasible, maintains the economic balance between the Parties.

18. Notices

The Lead's representative for the purpose of receiving notices shall until further notice be:

Director of Research Strategy and Services, The University of Birmingham, Edgbaston,
Birmingham, B15 2TT, UK

with a copy to:

Prof Gabriel Landini G.Landini@bham.ac.uk

Aston's representative for the purpose of receiving notices shall until further notice be:

Office for the General Counsel, Aston University, Aston Triangle, Birmingham, B4 7ET
ogc@aston.co.uk

with a copy to:

Dr Shereen Fouad, s.fouad@aston.ac.uk

UdelaR's representative for the purpose of receiving notices shall until further notice be:

Decana de la Facultad de Odontología
Prof. Dra. Mariana Seoane
Las Heras 1925, Montevideo 11100, Uruguay

decanato@odon.edu.uy

with a copy to:

Prof Gainer Jasa, gainer@odon.edu.uy

19. Dispute Resolution

If any dispute arises out of this Agreement the Parties will first attempt to resolve the matter informally through designated senior representatives of each Party to the dispute, who are not otherwise involved with the Project. If the Parties are not able to resolve the dispute informally within a reasonable time not exceeding two (2) months from the date the informal process is requested by notice in writing they will attempt to settle it by mediation in accordance with the Centre for Effective Dispute Resolution (CEDR) Model Mediation Procedure.

20. Law

This Agreement shall be governed and construed in accordance with the laws of England and Wales and the Parties agree to the exclusive jurisdiction of the English Courts. Except in the case that UdelaR is the sole defending party in a dispute, this Agreement shall be governed and construed in accordance with the laws of Uruguay.

21. Entire Agreement

This Agreement and its Schedules (which are incorporated into and made a part of this Agreement) constitute the entire agreement between the Parties for the Project and no statements or representations made by any Party have been relied upon by the other in entering into this Agreement.

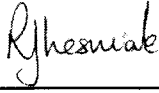
22. Counterparts

This Agreement may be executed in one (1) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. A signed copy of this Agreement delivered by e-mailed portable document format file or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Agreement.

23. In the event of any discrepancy arising between the Spanish and English versions of this Agreement the Parties agree that the English version shall prevail and bind all the Parties.

IN WITNESS WHEREOF this Agreement is executed as follows:

for and on behalf of **THE UNIVERSITY OF BIRMINGHAM**

Signed: 
Name: Rebecca Lesniak
Title: Research Support Manager
Dated: 14th December 2023

for and on behalf of **ASTON UNIVERSITY**

Signed: 
Name: Simon Green

Title: PVC Research

Dated: May 25, 2023

for and on behalf of **UNIVERSIDAD DE LA REPUBLICA**

Signed: _____

Name: _____

Title: _____

Dated: _____

**GONZALO
VICCI
GIANOTTI**

Firmado digitalmente
por GONZALO VICCI
GIANOTTI
Fecha: 2023.11.23
18:35:01 -03'00'

Schedule 1

Allocated Work

The plan consists of analysing CT scans of jaw bone with and without a metal wire marker inserted through the inferior dental canal to serve as an indication of its spatial position.

The scans will be provided by the collaborator at the Universidad de la República.

The CT scans with the wire marker will be segmented so the annotation of the canal can be identified in 3D and in any re-slicing of the data set. This will be investigated and code written by the collaborator at the University of Birmingham

Based on the identified segmented annotations, a subset of CT scans without the marker will then be trained using a variety of AI CNN methods to find the locations that coincide with the canal, in the annotated set. Another subset of CT scans will be tested for correctness of the localisation of the dental inferior canal, based on the annotations obtained. This will be investigated by the collaborator at the University of Aston.

The three collaborators will discuss progress achieved by these approaches and will jointly prepare papers and presentations.

Schedule 2

Materials to be transferred:

The data to be transferred for computer analysis from UdelaR to the Lead and Aston:

- a set of cone beam CT images from twenty (20) anonymised of jaw bones (existing holding, anonymous, dry jaw bones, used for teaching at the Anatomy Department Museum of the Faculty of Dentistry (UdelaR, Uruguay).

Collaboration Agreement - UoB - UdIR

Final Audit Report

2023-05-25

Created:	2023-05-25 (Greenwich Mean Time)
By:	Kevin O'Reilly (k.d.oreilly@aston.ac.uk)
Status:	Signed
Transaction ID:	CBJCHBCAABAawt2c4iLAT83JayoHUwCd1bj9MjhRlqm
Number of Documents:	1
Document page count:	13
Number of supporting files:	0
Supporting files page count:	0

"Collaboration Agreement - UoB - UdIR" History

-  Document created by Kevin O'Reilly (k.d.oreilly@aston.ac.uk)
2023-05-25 - 2:58:22 PM GMT
-  Document emailed to pvcr@aston.ac.uk for signature
2023-05-25 - 3:00:48 PM GMT
-  Email viewed by pvcr@aston.ac.uk
2023-05-25 - 3:21:09 PM GMT
-  Agreement viewed by pvcr@aston.ac.uk
2023-05-25 - 3:21:09 PM GMT
-  Signer pvcr@aston.ac.uk entered name at signing as Simon Green
2023-05-25 - 3:21:26 PM GMT
-  Document e-signed by Simon Green (pvcr@aston.ac.uk)
Signature Date: 2023-05-25 - 3:21:28 PM GMT - Time Source: server
-  Agreement completed.
2023-05-25 - 3:21:28 PM GMT