

CONTRACT FOR WORK

(hereinafter this "Contract"), executed pursuant to § 2586 et seq., in keeping with § 2631 et seq. of Act no 89/2012 Coll., the Civil Code, as amended, by and between:

I Contracting Parties

- 1.1. Client:** **Česká zemědělská univerzita v Praze**
(in English: Czech University of Life Sciences Prague)
Registered seat: Kamýcká 129, 165 00 Praha – Suchbátka
Acting through: Ing. Jakub Kleindienst, Bursar
Bankers: xxxx
Business ID: 60460709
VAT ID: CZ60460709
(hereinafter the "Client") on the one side

and

- 1.2. Contractor:** **NOVOGENE (HK) COMPANY LIMITED**
Registered seat: Level 54, Hopewell Centre, 183 Queen's Road East,
Hong Kong, China
Acting through: Guo Huijuan, on the basis of a power of attorney
Bankers: xxxx
Account number: xxxx
Business ID: 61112195
VAT ID: 61112195
(hereinafter the "Seller") on the other side
(hereinafter the "Contractor")

(Both the Client and the Contractor hereinafter also "Contracting Parties" or just "Parties")

On the basis of the tender result for the project of "Service for three bark beetle genome sequencing", implemented on the basis of public contract pursuant to Act no 134/2016 Coll., on Public Procurement, as amended, the Parties hereby execute the following public contract in the below wording:

II Subject of Contract

- 2.1** The Contractor hereby agrees to process, at its cost, for the Client, Service for three bark beetle genome sequencing (hereinafter referred to as the "Work"). The exact scope of the work is defined in Attachment No. 1 – Technical Specification and Attachment No. 2 – Tender price, both forming an integral part hereof.
- 2.2** The subject of performance are also additional services such as shipments, with the stated conditions four shipments (individual parcels with samples with dry ice shipped from the Client to the Contractor, sent at different times according to the Client's needs) are expected. Four shipments are included in the unit prices for work stated in Attachment No. 2 of this contract, if the whole process of sequencing ends without a failure. If quality check fails and other shipment of additional samples is needed or if more than 4 shipments in total are needed, they will be charged according to the price set in the Attachment No. 2 – Tender price.

- 2.3 The Contractor hereby agrees to be available at no charge to discuss the sequencing, troubleshoot, and answer questions included. Useful information for initial troubleshooting will be provided automatically with sequencing results that are difficult to sequence.
- 2.4 The Client hereby agrees to duly and timely take over the work implemented by the Contractor and pay the contract price to the Contractor as defined below.
- 2.5 The Contractor hereby agrees to perform the work with due professional care, within the agreed deadline, and within the scope and in the quality pursuant hereto.

III

Time and Place of Supply

- 3.1. The Contractor shall undertake to perform the Work within the following conditions:
- The analysis results shall be delivered to the Client within 120 days after the receipt of the samples by the Contractor.
 - The samples shall be sent to analysis (by post/freight forwarding) successively (at least 24 and at most 96 samples in one group) on dry ice and according to a procedure recommended by the Contractor.
 - The Client shall always inform the Contractor about sending the group of samples at least 2 weeks before sending the samples itself.
 - Data delivery (cloud/ hard drive/ any other server) must be included in the price to Art 4.2 of this Contract.
 - The Client requires a description of the methodology of the preparation of the library, together with the delivery of sequencing results and data analysis pipeline in detail as per high-quality publication requirements.
 - Client may need post-service support to understand the data given in the service.
- 3.2. If some of the samples shall not be assessed of the quality sufficient for the analysis, the Contractor agrees to immediately inform the Client, who shall additionally and without unnecessary delay provide a sample/samples of sufficient quality. If no additional samples are available, no services are required by the Client and only shipment will be paid according to the price stated in the Attachment No. 2 of this contract.
- 3.3. The place of the supply will be the buildings of the Faculty of Forestry and Wood Sciences of the FLD on the address of the registered seat of the Client, Czech University of Life Sciences in Prague, Kamýcká 129, 165 00 Praha – Suchbát, Czech Republic.
- 3.4. The Contractor shall fulfil its liability to duly perform the work by its completion and handover in an acceptance proceeding to the Client. The results shall be deemed delivered on the day of delivery of the e-mail with the results in attachment; with the link for results downloading to the Client's contact person or other similar way. The acceptance proceeding will be closed by a written acceptance protocol signed by contact person of the Client, which will be sent to the Contractor by e-mail. Otherwise, the work shall not be deemed duly and timely accepted. Both parties are obliged to report any changes of the contact person by e-mail to the other Contracting Party.

Contractor's contact person in acceptance proceeding and payment:

Name: xxxx
email: xxxx

phone: xxxx

Client 's contact person in acceptance proceeding and

payment: Name: xxxx

email: xxxx

phone: xxxx

Name: xxxx

e-mail: xxxx

phone: +xxxx

IV

Price and Payment Terms

- 4.1 The price of the work (unit prices) within the contracted scope implemented pursuant to the terms and conditions laid down hereby was specified on the basis of the bid of the Contractor submitted in the context of the tender as the maximum price (which may be exceeded).
- 4.2 The unit prices for the subject of contract are specified in Attachment No. 2 of this contract, in the amount of CZK, V.A.T: exclusive. The V.A.T. shall be calculated and levied in compliance with the applicable tax legislation valid as of the date of taxable supply.
- 4.3 The payments will be executed on base of acceptance protocol pursuant to Art. 3.4 of this Contract after the data delivery of each particular sequencing service or after an additional shipment of samples (in case of quality check failure or more than 4 sequencing services are required, pursuant to Art. 2.2 of this Contract).
- 4.4 The price includes all related costs, including but not limited to the costs of shipping (i. e. four shipments are included in unit prices specified in Attachment No. 2 of this Contract) and potential administrative fees, taxes, customs duties, approval proceedings, required testing, conformity statement, certificates and attests, transfer of rights, insurance, etc.
- 4.5 The price shall only be calculated based on the services actually provided by the Contractor.
- 4.6 The price shall be paid by the Client in the Czech currency on the basis of the relevant tax invoice by wire transfer to the bank account of the Contractor. The Contractor shall issue the invoice in 15 calendar days from due and timely delivery and acceptance of the goods (sample group) by the Client pursuant hereto on the basis of the relevant acceptance protocol.
- 4.7 The tax invoice shall include all appurtenances of a correctly issued tax document in the sense of the relevant legislation, including but not limited to Act no 235/2004 Coll., on the Value Added Tax, as amended. The invoice shall include identification of the project and the operation programme from which the supply is financed: "Building of an excellent research team at the Faculty of Forestry and Wood Sciences of Czech University of Life Sciences on Prague and its instrumental background focused on mitigation of the impact of climate change on forests (from the gene level to the landscape level)" (reg. ID of OP VVV CZ.02.1.01/0.0/0.0/15_003/0000433) financed form the "Operation programme Research, Development and Education", unless otherwise stated by the Client. If the invoice misses any of the required appurtenances the Client shall be entitled to return it within its payment deadline to the Contractor for correction without getting into any delay with its payment. A new payment deadline shall start from the date of the redelivery of the corrected invoice to the Client. The invoice payment deadline shall be 30 days (or more) from documented delivery to the Client. The Contractor shall deliver the invoice to xxxx and projekt@fld.cz. No other delivery shall be deemed appropriate and the Client shall not be liable to pay an invoice delivered in any other way.

- 4.8 The day of payment shall be the date of debit of the amount of the invoice from the bank account of the Client in favour of the Contractor's bank account.
- 4.9 In accordance with Czech law, the payment of the price or its part shall be transferred to the bank account of the Contractor published by the tax administrator pursuant to § 98 of Act no 235/2004 Coll., on the Value Added Tax, as amended, if this liability is applicable to it, even if the bank account number specified in the invoice is different. If the Contractor has no published bank account pursuant to § 98 of Act no 235/2004 Coll., on the Value Added Tax, as amended, published by the tax administrator, then the Client shall affect the payment to the bank account after its publication by the tax administrator, without getting into any delay in the invoice payment. Publication of the bank account number by the tax administrator shall be notified by the Contractor to the Client without delay. This provision shall not apply if the Contractor is not liable to publish its bank account pursuant to Act no 235/2004 Coll., on the Value Added Tax, as amended.
- 4.10 If at the moment of the taxable supply the competent tax administrator publishes information that the Contractor is an unreliable taxpayer the Client as the guarantor hereby reserves the right to reduce the amount paid out to the Contractor as the purchase price of the supply by the relevant amount of V.A.T. and notify the Contractor accordingly in advance. By application of this procedure the Contractor's claim towards the Client shall be reduced by the relevant amount of V.A.T. and the Contractor shall not be entitled to request the V.A.T. amount payment from the Client or enforce it in any manner.

V

Quality Guarantee

- 5.1 The Contractor hereby provides guarantee for the quality of every part of the work in the length of 24 months. The warranty period shall start on the day of the work takeover by the Client, i.e. on the date of execution of the protocol on due and timely takeover of the work by the Client.
- 5.2 The Client shall be liable to notify the Contractor about any warranty defect without delay. The Contractor shall perform warranty repairs free of charge in 10 calendar days from the defect reporting. In the case of failure to comply with this deadline the Client shall be entitled to have the defect remedied by a third party at the cost of the Contractor even without prior notification of the Contractor of this procedure.
- 5.3 In the case of a warranty repair the warranty period shall be extended by the period from the defect notification to the defect remedy.
- 5.4 Complaints can be applied by the last day of the warranty period, with a complaint sent on the last day of the warranty period also deemed timely applied.
- 5.5 In the case of a defect of the work or its part which cannot be repaired the Client shall be entitled to partly withdraw from this contract within the scope of the defective supply, and request refund of the part of the price corresponding to the price of the defective part of the work.

VI

Penalty Clause

- 6.1 In the case of the Contractor's delay with the work handover within the deadline pursuant hereto, the Client shall charge a contractual penalty 1.500 CZK for each commenced day of the delay.
- 6.2 The Contractor shall further be charged a contractual penalty 1.500 CZK of the work for each commenced day of the delay with remedy of complained of warranty defects within the deadline pursuant to Art. 5.2 above herein.

- 6.3 In the case of the Client's delay in the invoice payment the Contractor shall be entitled to charge a delay interest in the amount of 0.05 % of the amount due for each commenced day of the delay.
- 6.4 Circumstances excluding responsibility do not apply to the liability to pay a contractual penalty.
- 6.5 The Client shall be entitled to unilaterally offset any contractual penalty against any receivable of the Contractor towards the Client (including the Contractor's receivable represented by payment of the contract price of the work).
- 6.6 Payment of a contractual penalty is without prejudice to the rights of the Client for full damage compensation.
- 6.7 The liable party hereby agrees to pay the charged contractual penalty (penalties) within 14 days from receipt of the relevant settlement. The same deadline also applies to the delay interest.

VII

Contractor's Liabilities

- 7.1 The Contractor shall be liable to implement the work in compliance herewith.
- 7.2 The Contractor shall be liable to inform the Client about the progress of the work on a regular basis and prove actual progress on the Client's request submitted in compliance herewith.
- 7.3 The Contractor shall be liable to perform all works and activities and provide all supplies to the Client for the work to be duly and timely completed within the contracted deadline and submitted to the Client for use as agreed and under the terms and conditions hereof. The Client hereby agrees to provide all necessary assistance to the Contractor to that end.
- 7.4 The Contractor hereby confirms to have been fully acquainted with the work scope and specification, with the technical, qualitative and other conditions of the work implementation, and to possess the required professional knowledge, experience and resources to be able to duly perform the work. The Contractor hereby agrees to implement the work in compliance herewith, with the applicable generally binding legislation, technical standards and to endow the work with properties and quality at least corresponding to the usual purpose of such work.
- 7.5 The Contractor shall be liable for damage caused to the Client and third parties by violation of the Contractor's liabilities laid down herein or by breach of the applicable legislation and standards.
- 7.6 The work as agreed herein, and in the Attachments, hereto shall not be changed without prior written consent of the Client.
- 7.7 The result of the Contractor's activity (the work or its part) pursuant hereto shall not be provided by the Contractor to any other party but the Client.

VII

Client's Liabilities

- 8.1 The Client shall pay the Contractor for the duly and timely performed work pursuant hereto.
- 8.2 The Client shall provide the Contractor with assistance needed for implementation hereof.

IX

Final Provisions

- 9.1 This contract may only be amended by written addenda signed by both contracting parties. All Attachments hereto form an integral part hereof. According to the law, this contract shall come

to force on the day of its execution by both parties and effect on the date of its publication in the register of contracts in compliance with Act no 340/2015 Coll., on Special Terms of Effectiveness of Certain Contracts, on the Publication of these Contracts and on the Contract Register (the Contract Register Act), as amended.

- 9.2 The contract shall be valid till 30.6.2023 all samples shall be delivered and analysed within this period.
- 9.3 This contract is drawn up in and signed electronic form.
- 9.4 This contract is governed by Act no 89/2012 Coll., the Civil Code, as amended, and the related legislation. All data and information disclosed by the contracting parties to each other in the context of execution hereof are confidential and shall not be disclosed by either party to any third party and shall not be used for private purposes of the parties in contradiction to the purpose for which the information was disclosed. In the case of violation of this provision and unjust enrichment following from it to either party the unjust enrichment shall be given over to the other party.
- 9.5 In the case of invalidity of any of the provisions hereof the remaining provisions and the contract as a whole shall not be affected, unless the invalid provision is by its nature, content or circumstances of conclusion not severable from the rest of the contract content.
- 9.6 The contracting parties shall always strive for amicable settlement of any potential disputes arising from this contract or related to it. If an amicable settlement cannot be reached in 30 calendar days from the first notification of the dispute to the other party either party shall be entitled to submit its claim to the competent court of justice.
- 9.7 The Contractor agrees without reservations with publication of the full wording hereof for this contract to be able to become the subject of provided information in the sense of Act no 106/1999 Coll., on the Free Access to Information, as amended, and with publication of the full wording hereof pursuant to § 219 of Act no 134/2016 Coll., on public Procurement, as amended, and pursuant to Act no 340/2015 Coll., on Special Conditions of Effectiveness of Certain Contract, on the Publication of these Contracts and on the Contract Register (the Contract Register Act), as amended.
- 9.8 The Contractor hereby agrees that it is the liable party in the sense of § 2 (e) of Act no 320/2001 Coll., on Finance Control, as amended. The Contractor shall be liable to fulfil its liabilities as the liable party following to it from the above quoted act.
- 9.9 The integral parts of this agreement are an Attachment No. 1 – Technical specification and an Attachment No. 2 – Tender price.

9.10 Having read this contract the parties hereby agree with its content, which they say was worded seriously, certainly, comprehensibly and on the basis of their genuine free will, in witness whereof they attach their signatures below.

In Prague, on

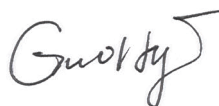
On behalf of Client:
Czech University of Life Sciences Prague



.....
Ing. Jakub Kleindienst
bursar

In Hong Kong, on 18/02/2022

On behalf of Contractor:
NOVOGENE (HK) COMPANY LIMITED



.....
Guo Huijuan
on the basis of a power of attorney

Name of the service: Service for three bark beetle genome sequencing

Required activities - their description, scope (e.g., the number of samples, forest area), time (requirements) etc.:

1. Pre-made Hi-C or Omni-C libraries sequencing Illumina or Novaseq PE150 Q30≥85% (100x coverage)

Services: Library quality control (QC) (3 samples), Sequencing 40Gb/library (3 samples), data delivery via cloud or hard drive transfer.

2. Whole-genome Sequencing on Novaseq or the latest Illumina platform, PE150 Q30≥85%. Illumina short insert DNA library 100x coverage.

Services: gDNA library prep and sequencing 40Gb/sample raw data in fast (3 samples), Data delivery via cloud or hard drive transfer.

3. Illumina short-read transcriptome sequencing (48 samples) for gene model Prediction. mRNA sequencing (Novaseq or Illumina PE150 Q30≥85%)

Services: cDNA library preparation (poly-A selection) and sequencing 50M PE reads=15 Gb/sample, Data delivery via cloud or hard drive transfer.

4. Data analysis service (+ customized): Complete genome data analysis (genome-level assembly, annotation, comparative, and evolutionary analysis) – 3 genomes. The contractor will provide pacbio sequences of genomes for incorporating into the analysis.

Services: Genome level assembly service; Annotation service; Comparative and Evolutionary Analysis. Analysis should also include the following:

- a) Synteny analysis for 2 genomes, [*3x]
- b) Genome element Circus (for 3 genomes)
- c) Gain and loss analysis for 3-5 genomes – [*1]

Altogether in 4 shipments, (price for 4 shipments is included in the unit price stated in the Attachment No. 2 of the contract – Tender price , all other shipments will be charged)

The Client also requires the following to be included in the data analysis:

1. Survey Analysis Content

Data quality control: filtering reads containing adapter or with low quality

Genome size estimation

Heterozygous rate & Repeat content estimation

Contamination estimation

2. Pipeline for assembly (genome level) and annotation.

Assembly Analysis Content

Data quality control

Sequencing data error correction

Contig assembly

Scaffold assembly

Gap filling

Genome assembly results statistics

Assembly quality control

Completeness analysis of the genome.

3. Annotation Contents

Repetitive sequence annotation

Structural annotation

Gene function annotation

Non-coding RNA annotation

4. Comparative and Evolutionary Analysis

Gene family clustering

Phylogenetic tree construction (including estimation of divergence time)

Gene family expansion and contraction

Positive selection

Česká zemědělská univerzita v Praze

(in English: Czech University of Life Sciences Prague)

Registered seat: Kamýcká 129, 165 00 Praha – Suchbát

Acting through: Ing. Jakub Kleindienst, Bursar

Bankers: XXXX

Business ID: 60460709

VAT ID: CZ60460709

Clarification

NOVOGENE (HK) COMPANY LIMITED confirms the shipment cost is “0” CZK.

Attachment No. 4 – Tender price

Service for three bark beetle genome sequencing

	Unit price	Unit	Estimated total number	Estimated value
Pre-made HiC or Omni-C libraries sequencing	10000	Sample	3	30,000.00 Kč
Whole-genome DNA Sequencing on Novaseq or the latest Illumina platform (short insert DNA library 100x coverage)	12000	Sample	3	36,000.00 Kč
Illumina short-read transcriptome (mRNA) sequencing	5400	Sample	48	259,200.00 Kč
Data analysis service: Complete genome data analysis	241000	Genome data analysis	3	723,000.00 Kč
Shipment (over 4 free shipments, or if quality check fails and other shipment of additional samples is needed)	0	batch of samples	4	- Kč
Tender price				1,048,200.00 Kč

Yours faithfully,

SIGNED for and on behalf of

Novogene (HK) Company Limited

Name: Guo Huijuan

Regional sales director

Signature:



Email: guohuijuan@novogene.com

Tel: +86-18811773309



POWER OF ATTORNEY

By this Power of Attorney issued on **1st of Jan, 2022** by NOVOGENE (HK) COMPANY LIMITED limited liability company incorporated in China, registration number 61112195-000-03-18-6 , with registered office address: LEVEL 54, HOPEWELL CENTRE, 183 QUEEN'S ROAD EAST, HONG KONG CHINA. («the Company»), hereby appoints

Ms. GUO HUIJUAN, holder of passport E05149266, issued on 29 SEP, 2012, residing at: 28 SEP, 2022 (hereinafter- "the Attorney") as the true and lawful attorney of the Company to carry out the following actions on behalf of the Company:

1. On behalf of the Company to negotiate, conclude, enter into and undertake contracts related to Next Generation Sequencing (NGS) service;
2. To sign on behalf of the Company NGS tenders and contracts necessary for the implementation of above-mentioned items.

This Power of Attorney is issued and shall remain in full legal force and effect up to 1st Jan 2023 unless will be revoked by the Company mentioned-above earlier in writing.



Chief Executive Officer: Ruiqiang Li

Doložka konverze do dokumentu obsaženého v datové zprávě

Tento dokument, který vznikl převedením vstupu v listinné podobě do podoby elektronické pod
pořadovým číslem **106204_002002**, skládající se z **11** listů, se doslovně shoduje s obsahem vstupu.

Vstup bez viditelného prvku.

Jméno a příjmení osoby, která konverzi provedla: **xxxx**

Vystavil: **Česká pošta, s.p.**

Pracoviště: **Praha 620**

Česká pošta, s.p. dne **02.03.2022**



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