

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 – Suchdol
Acting through: Ing. Jana Vohralíková, Bursar
Bankers: Česká spořitelna, a. s.
Account number: 500022222/0800
Business ID: 60460709
VAT ID: CZ60460709
(hereinafter the "Client") on the one side

and

- 1.2. Contractor:** **NOVOGENE (HK) COMPANY LIMITED**
Registered seat: Rm. 19 C, Lockhart Ctr., 301-307 Lockhart Rd., Wan
Chai, Hong Kong, China
Acting through: Shuran Yo, on the basis of a power of attorney
Bankers: Citibank N.A., Hong Kong Branch
Account number: 703805888
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 "General sequencing – II.", 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, a RNA sequencing analysis of 350 bark beetle (subfamily Scolytinae) samples. The exact scope of the work is defined in Annex 1 – Technical Specification, forming an integral part hereof.
- 2.2 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.
- 2.3 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 hereby agrees to implement the work in compliance herewith and hand it over to the Client within the following deadlines:
- Client sample delivery: first delivery in 12 weeks from the contract execution, samples will be delivered gradually in groups from 24 to 96 samples after prior notice at least 2 weeks in advance
- Activity commencement: immediately after sample receipt from the Client, results must be delivered within 40 days from the sample takeover by the Contractor
- Sample quality assessment: immediately after sample takeover by the Contractor
- Completed work acceptance: up to 3 years from contract conclusion
- 3.2 The Contractor is obliged to ensure the transport of the samples from the Client to the place where the works will be performed by the Contractor. Securing the transport of samples by the Client up to a maximum of 10x is included in the price if it is necessary to ensure the transport of the sample more than once by the Client, the Client will pay for the transport.
- 3.3 If the Contractor assesses the sample quality as insufficient the Client must be informed without delay. The 3 year deadline for the work completion and handover will start with contract entering into force.
- 3.4 The place of the supply will be the building of the Faculty of Forestry and Wood Sciences and the Wood Work Pavilion of the FFWS on the address of the registered seat of the Client, Czech University of Life Sciences in Prague, Kamýcká 129, 165 00 Praha – Suchbát.
- 3.5 The Contractor shall fulfil its liability to duly perform the work by its completion and handover in an acceptance proceeding to the Client. The acceptance proceeding will be closed by a written work takeover protocol signed by authorised representatives of the Client and the Contractor. Otherwise the work shall not be deemed duly and timely accepted.

IV

Price and Payment Terms

- 4.1 The price of the work within the contracted scope implemented pursuant to the terms and conditions laid down hereby was specified on the basis of the bid of the Seller submitted in the context of the tender as the maximum price (which may not be exceeded).
- 4.2 The price is specified in the Czech national currency in the amount of CZK 1.400.000,- (in words: one million four hundred thousand Czech crowns), 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 price includes all related costs, including but not limited to the costs of transport and potential administrative fees, taxes, customs duties, approval proceedings, required testing, conformity statement, certificates and attests, transfer of rights, insurance, transport costs etc.
- 4.4 The price shall be paid by the Buyer 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 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.
- 4.5 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 from the operation programme Research, Development and Education." 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.

- 4.6 The invoice payment deadline shall be 30 days from documented delivery to the Client. The Contractor shall deliver the invoice to the following address: Czech University of life Sciences in Prague, Kamýcká 129, 165 00 Praha – Suchbát. No other delivery shall be deemed appropriate and the Client shall not be liable to pay an invoice delivered in any other way.
- 4.7 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.
- 4.8 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 effect 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.
- 4.9 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 the supply 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 Seller about any warranty defect without delay. The Contractor shall perform warranty repairs free of charge in 7 business 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 in the amount of 0.5 % of the price of the work for each commenced day of the delay.
- 6.2 The Contractor shall further be charged a contractual penalty in the amount of 0.5 % of the price 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 buyer 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 annexes 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 annexes hereto form an integral part hereof. 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 This contract is made and signed in electronic form.
- 9.3 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.
- 9.4 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.
- 9.5 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 business 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.
- 9.6 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.
- 9.7 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.
- 9.8 The integral part of this agreement is an Annex n. 1 – Technical specification.

9.9 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

In Hong Kong

On behalf of Client:
Czech University of Life Sciences Prague

On behalf of Contractor:
NOVOGENE (HK) COMPANY LIMITED

.....
Ing. Jana Vohralíková
Bursar

.....
Shuran Yu
on the basis of a power of attorney

Name of the service: General sequencing

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

- RNAseq analysis of provided samples of bark beetles from the subfamily Scolytinae (total RNA)
- Number of samples: **350 pcs**
- Samples of sufficient quality mean samples with the following minimal parameters: amount of sample $\geq 1\mu\text{g}$, concentration RNA $c \geq 20 \text{ ng}/\mu\text{l}$, cleanness of the sample $\text{OD } 260/280 \geq 1.8$, $\text{OD } 260/230 \geq 1.8$; RNA 28S:18S ≥ 1.0 , RIN ≥ 7 ;
- In case some of the samples shall not be assessed of 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.
- Period for the delivery of samples to the Contractor:
- The results of the sequencing shall be delivered to the Client within 40 working 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, at the Client's costs. The Contractor shall always inform the Client about sending the group of samples at least 2 weeks before sending the samples itself.
- the first group of samples shall be handed over by the Client to the Contractor within the period of 12 weeks after the conclusion of the contract. The contract shall be concluded for a definite period of 3 years, all samples shall be delivered and analyzed within this period.
- Data delivery (Hard disk) and sample transport under 15-20 kg of dry ice (12 times) charges need to be included in the bid.

Requirements on the methodological procedure:

- Quality check of the delivered samples RNA before the commencement of the analysis
- Enhancement of **mRNA fraction** (polyA enrichment or ribodepletion) before the preparation of cDNA library
- Preparation of cDNA library (type of the library random-primed).
- Usage of the newest platforms of RNA sequencing, e.g. **HiSeq 4000** or BGI-seq 2000 or Novaseq6000 the Client shall explicitly enable offer of equal solutions similarly
- **150 bp pair-end reads** (bilateral reading in the section length 150 bp)
- At least **30 million good quality reads** (reading frames) per replicate or sample (9G raw data).
- Requirement on the quality of data: Phred value min. **Q30 for at least 85%** reads (reading frames) and at the same time Phred value min. Q20 for at least 90% reads (reading frames)
- Recommendation of the sequencing results electronically via server / shared disc in the format fasta and fastq, generally compatible data with databases of referential genome regardless of the used technology of sequencing.
- Multiplex reading, removing of adaptors and their delivery with reports QC.
- The Client requires description of methodology of the preparation of the library, together with the delivery of sequencing results.