



**Jordan Society for scientific research, entrepreneurship,
and creativity**
Tender announcement to submit laboratory services
**Tender Extended: “BESTMED Grape
Living Labs”**

Jordan Society for scientific research, entrepreneurship, and creativity
Tender announcement to submit laboratory services
Tender Extended: "BESTMED Grape Living Labs"

Introduction:

Jordan society for scientific research, entrepreneurship, and creativity (JSSREC) is an NGO organization established in 1999 and focus on the spreading of scientific research culture. JSSREC is ap partner in a project funded by EU titled "New Business opportunities & Environmental suSTainability using MED GRAPE nanotechnological products – BESTMED GRAPE". One of the BESTMED GRAPE requirements is the living labs; where trainees will take a pharmaceutical concentrated course related to the extraction of phenolic compound from different grape pomace varieties.

The main requirement from the qualified organization for these living labs is to provide the specialized devices, materials, and substances for the implementation with the best quality and prices, which are:

TOR for Devices and materials for living pharmaceutical laboratories:

Living Lab 1:

Item	Amount / quantity
Structures	
Seed bank <i>(if possible)</i>	No. 1
Dehydration room or room with dehumidifiers <i>(if possible)</i>	No. 1
Classroom for 30 people	No. 1
Equipment	
Freezer or specialized freezing equipment 18°C to -25°C <i>(if possible)</i>	No. 1
Incubation cabinets/chambers	No. 1 at 25°C
Stereo microscope	No. 1

Fridge	No. 1 at 5°C
0.0001 g lab analytical balance	No. 1
Flatbed scanner (e.g. Epson Perfection V550)	No. 1
Pc	No. 1
<u>Materials</u>	
Metal sieves with approximately 2 mm mesh	No. 5
A3 paper	No. 100
Scalpel	No. 10
Petri dishes 90-mm diameter	No. 150
Laboratory Filter Papers	No. 5 boxes of 100
Agar (1%)	1 kg
Forceps	No. 30
Silica gel	5 kg
Gloves (Size: M, L)	50 pairs for each size
Ethanol 96%	1000 ml
Hermetic/sealed containers	No. 10
Rectangular plastic containers (Size:175 x 120 x 55 mm)	No. 10
Self-indicating strip to monitor humidity	No. 10
Sandpaper grit size n. 80 – (Size: 9 x 11 cm)	No. 10 sheets
Lab spoon spatula	No. 10
Deionized water	5000 ml
Lab coat (Size: M, L)	5 for each size
500 ml beaker	No. 5
1000 ml beaker	No. 5
Paper towels	No. 2 rolls
Disposable Face Masks-Protective	No. 2 boxes of 50
Disposable KN95 Face Mask	No. 6

Living Lab 2:

Polyphenol Extraction: Pomace preparation	
Item	Amount / quantity
<u>Equipment and materials</u>	
Fresh pomace without biotic or abiotic contaminants	250 g
Plastic laboratory trays in polypropylene	No 1
Laboratory ventilated oven	No 1
Laboratory blender	No 1
Laboratory ball mill	No 1
Vacuum sealing bag device + bags	No 1
Laboratory paper towel	No 1 rol
<u>Reagents</u>	



Ultrapure Water (18 MΩ cm, obtained with a Milli-Q System)	1-5 L
Pomace solid-liquid extraction	
Item	Account / Quantity
<u>Equipment and materials</u>	
Precision weighing balance (0.01 grams up to 3200 grams)	No 1
Spoon spatula stainless steel (4 mL and 11 mL capacity)	No 1-3
Weighing boats in polystyrene (80x80x20)	No 100
Glass borosilicate measuring cylinders (1 L, 2 L)	No 2
Glass borosilicate measuring beaker (500 mL, 1 L, 2 L)	No 5
Erlenmeyer conical borosilicate flask + ftopper (500 mL - 1 L)	No 5
Lab-scale orbital shaker + platform (230 V, speed selection to 300 rpm with soft start)	No 1
Laboratory paper towel	No 1 rol
Reagents	
Ultrapure water (18 MΩ cm) (obtained with a Milli-Q System)	10 L
Ethanol Absolute Anhydrous >99.8%, (Carlo Erba Reagents, France)	5 L
Solvent removal and polyphenols recovery	
Item	Amount / Quantity
<u>Equipment and materials</u>	
50 mL polypropylene tubes	No 10/20
Glass borosilicate measuring beaker (100 mL, 250 mL, 500 mL)	No 10
Rotary evaporator flask NS 29/32 (100 mL, 250 mL, 500 mL)	No 5
Laboratory refrigerated centrifuge (capacity vessels 15 mL and 50 mL)	No 1/2
500 -1000 mL vacuum filtration unit/filters set 0.45 μm	No 2/4
Vacuum rotating evaporator (Rotavapor, speed 20 - 300 rpm, support rotation flask sizes from 50 mL to 3L, Bath temperature from ambient to 210° C)	No 1/2
Vacuum Freeze dryer (Lyophilizer)	No 1
Vacuum sealing bag device + bags	No 1
-20° / -80° C Freezer	No 1
Micropipette (1-5 mL) or sierological pipettes (5-10 mL)	No 20/50
Pipette controller for sierological pipettes	No 2
Laboratory paper towel	No 1 rol
Food analytical chemical analyses:	
Total Polyphenolic (TP) content by Folin-Ciocalteu's method	
Item	Amount / Quantity
<u>Equipment and materials</u>	
Calibrated glass volumetric laboratory flasks class A x 10 mL + stopper	No 10/20



Glass vials x 1.8 mL + caps	No 200
Glass funnels	No 10
Glass beakers x 250 mL	No 10
Adjustable bottle top dispenser x 1-5 mL	No 2
Micropipettes x 500 μ L, 200 μ L, 100 μ L and 50 μ L	No 200
Adjustable micropipette x 200-1000 μ L	No 2/4
Plastic cuvettes x 10 mm Kartell® (10 x 10 x 45 mm) (cod. 00939-00)	No 200
Spectrophotometer	No 1/2
Laboratory paper towels	No 1 rol
Reagents	
Gallic acid monohydrate (ACS REAGENT), (SIGMA-ALDRICH, St. Louis, MO, USA);	No 1
Folin-Ciocalteu's phenol reagent (SIGMA-ALDRICH, St. Louis, MO, USA);	No 1
Sodium carbonate decahydrate, puriss. p.a., $\geq 99.0\%$ (SIGMA-ALDRICH, St. Louis, MO, USA);	No 1
Methanol for HPLC, gradient grade, $\geq 99.9\%$ (SIGMA-ALDRICH, St. Louis, MO, USA);	5 L
Ultrapure water (18 M Ω cm, obtained with a Milli-Q System)	10 L
Identification and quantification of polyphenolic compounds by HPLC-DAD	
Item	Amounts / Quantity
Equipment and materials	
Glass vials x 1.8 mL + caps	No 100
Laboratory glass flask x 2 L	No 2-5
Micropipettes x 500 μ L, 200 μ L, 100 μ L, 50 μ L, 20 μ L, and 10 μ L	No 100
Adjustable micropipette x 20-100 μ L, 200-1000 μ L, and 1000-5000 μ L	No 2-4
Kinetex PFP C18 column (150 \times 4.60 mm, 5 μ m, Phenomenex, Casalecchio di Reno, Bologna, Italy)	
Agilent 1260 Infinity II Quaternary System (Agilent Technologies, Waldbronn, Germany) consist of: <ul style="list-style-type: none"> • Pump module 1260 Quat Pump VL (G7111A, Serial No. DEAX01325), • Autosampler module 1260 Vialsampler (G7129A, Serial No. DEAEQ16862), • Diode array detector (DAD), (Serial No. DEAA310070); 	No 1
Laboratory paper towel	No 1 rol
Reagents:	
0.22 M Phosphoric acid (obtained from dilution of Orthophosphoric acid 85% ACS-ISO, for analysis, CARLO-ERBA, Rodano, MI, Italy)	5 L
Acetonitrile E CHROMASOLV®, for HPLC, for, UV, $\geq 99.9\%$	5 L

(GC) (SIGMA-ALDRICH, St. Louis, MO, USA)	
Methanol, HPLC gradient grade, $\geq 99.9\%$ (SIGMA-ALDRICH, St. Louis, MO, USA)	5 L
Ultrapure water (18 M Ω cm, obtained with a Milli-Q System)	10 L
Gallic acid monohydrate (ACS REAGENT), (SIGMA-ALDRICH, St. Louis, MO, USA)	No 1
Caftaric acid $\geq 97.0\%$ (2-Caffeoyl-L-tartaric acid, SIGMA-ALDRICH, St. Louis, MO, USA)	No 1
Quercetin-3-O-glucoside (SIGMA-ALDRICH, St. Louis, MO, USA)	No 1
Malvidin-3-O-glucoside (SIGMA-ALDRICH, St. Louis, MO, USA)	No 1

Living Lab 3:

Materials and equipment	
Item	Amount / quantity
0.0001 g lab analytical balance	No. 8
Thin lab spatula	No. 30
50 ml beaker	No. 15
100 ml beaker	No. 15
250 ml beaker	No. 15
500 ml beaker	No. 15
Magnetic stirrer with heating plate	No. 15
Hand blender	No. 15
Weighing paper 102×102 mm or disposable weighing dishes 43x43 mm pack of 500	No. 2
Mortar and pestle	No. 15
Size 0 hard gelatin capsules	No. 1000
Capsule filling machine	No. 15
Soft gelatin capsules	No. 1000
5 ml Syringe	No. 100
Plastic pipette	No. 500
100 ml graduated glass cylinder	No. 15
Gloves - size S, M, L	150 pairs for each size
Zetasizer nano + size and zeta potential measurement cells	(if it is available)
Hydroxyethyl cellulose	500 g
Parabens	250 g
Bidistilled water	25 l
Montanov 202	250 g
Montanov 68	250 g
Cetyl alcohol	250 g
Finsolv or vegetable oil	150 g
Paraffinum liquidum	1 l
Dimethicone	500 g
Vitamine E acetate	200 g
Sepigel 305	250 g
Glycerol	5 l



BESTMEDGRAPE

Zetesol 100	1000 g
Gum tragacanth	250 g
Kaolin clay	2000 g
Olive oil	1500 g
Silica	250 g
Sodium chloride	500 g
Type 2 excipient	2000 g
Sodium alginate	100 g
Calcium chloride	200 g
Sucrose	200 g
Ethanol 96%	2000 ml
Mint essence	50 g
Soy lecithin granules	2000 g
Sodium hyaluronate	100 g

Living Lab 4: most materials preferred to be available (Subjected)

Materials and equipment	
Item	Amount / quantity
75 cm ² cell culture flask	No. 100 /50
10 ml serological pipette, sterile, individually wrapped	No. 200 /50
25 ml serological pipette, sterile, individually wrapped	No. 200 /50
50 ml serological pipette, sterile, individually wrapped	No. 200 /50
3 ml sterile plastic pipette	No. 400 /100
96-well cell culture plate	No. 200 /50
Cell culture petri dishes 100x200 mm	No. 200 /50
15 ml polypropylene conical tube, screw cap, sterile	No. 200 /50
50 ml polypropylene conical tube, screw cap, sterile	No. 200 /50
8-channel 10-100 microl micropipette	No. 3 /1
100-1000 microl micropipette	No. 6 /2
20-200 microl micropipette	No. 6 /2
10-100 microl micropipette	No. 6 /2
0.5-10 microl micropipette	No. 6 /2
100-1000 microl microtips	No. 1000
10-200 microl microtips	No. 2000
0.5-10 microl microtips	No. 1000
Permanent markers	No. 35
Water bath	No. 2
CO ₂ incubator	No. 1
Centrifuge	No. 2
Automated cell counter (including counting chambers)	No. 1
Microplate reader	No. 1
Inverted light microscope	No. 3 /1
MTT Thiazolyl Blue Tetrazolium Bromide (Merck Cod. M2128, 1 g)	No.1



BESTMEDGRAPE

DMEM Dulbecco's Modified Eagle's Medium - high glucose with 4500 mg/L glucose, L-glutamine, and sodium bicarbonate, without sodium pyruvate, liquid, sterile-filtered, suitable for cell culture (Merck cod. D5796, 500 ml)	No. 6
Phosphate Buffered Saline pH 7.4 (Gibco cod. 10010-015, 500 ml)	No. 3
FBS Qualified Origin South America 500 ml (Gibco)	No. 4
Pen/strep (Gibco cod. 15140122, 100 ml)	No. 1
Trypsin (Gibco cod. 12604-013 – Tryple express 100 ml)	No. 2
Hydrogen peroxide (Merck cod. 216763, 100 ml)	No. 1

Bid instruction:

- Technical offer should include a description of the laboratory/organization and its superiority and specialty related to the subject of this bid, where it should have an excellent experience in pharmaceutical field and have a well-prepared laboratory.
- The offers include a copy of official documents on the nature of the organization and its work, and the offer should include official authorization for one of its employments on a letter headed from the organization.
- Candidates should submit technical and financial offers into two separated documents (pdf or hard copy).
- Any bids sent to any other email address will be disregarded. Alternatively, bids can be submitted in a hard copy in a sealed envelope marked with the bid name and number to the below address.
- Bid should be valid until 90 days.
- Payments are only made upon satisfactory completion every living lab.
- Contract will be signed after week of offers' evaluation.
- Your questions can be sent to Eng. Lina Al Hassan / Project Scientific Coordinator at: info@jssr.jo, where the deadline is: 07/11/2020.
- All bids shall be emailed to: info@jssr.jo by deadline of 19/12/2020, 15:00 with all the required documents in PDF format. The subject should clearly indicate the (BESTMEDGRAPE living labs).
- Offers sent by email or received by hard copy after the mentioned deadline will be excluded.

Jordan society for scientific research, entrepreneurship, and creativity
1st floor, building no. 4



BESTMEDGRAPE

Khairo Deraneyyeh street
Alrasheed District
P.O.Box: 13900 Amman 11942
Telefax: 065166683
Mobile: 0797007869
Email: info@jssr.jo
Amman – Jordan