

Ifomu lokuvuma elinolwazi

Sicela ufunde yonke ifomu. Uma uvuma futhi unikeza imvume yokuba yingxenywe yocwaningo, sicela unikeze igama lakho, isiginesha, usuku nesikhathi.

Ngiyabonga!

ULWAZI LOKUFUNDA NESIKHATHI SOKUXHUMANA ESINESIMISO

CSIR Microbiome Mapping Initiative (CMMI)

Isihloko sokufunda: Isifinyezo sokwehlukahluka kwamathumbu wezinhlalo ezincane zabantu baseNingizimu Afrika basemadolobheni: Umthelela wokudla, indlela yokuphila kanye nesimo senhlalo nomnotho. Sanibonani,

Uyacelwa ukuthi ubambe iqhaza ocwaningweni olwenziwe nguClaudine Nkera-Gutabara (obhekele iziqu

ze-PhD) kanye nabaqondisi uProf Scott Hazelhurst noDkt Robyn Kerr base-University of the Witwatersrand,

ngokubambisana noDkt Jerolen Naidoo we-Bioengineering & Integrative Genomics Group (I-Next

Generation Health Cluster) e-CSIR. Senza ucwaningo ukuthola okuningi ngezigidigidi zamagciwane nezinye

izinto eziphilayo (ezibizwa nge-microbiome) ezihlala emathunjini akho. Ucelwe ukuthi ubambe iqhaza

kulolu cwaningo ngoba i-microbiome yakho ihlukile - ayifani nanoma ngubani omunye emhlabeni. Kuzoba

nababambiqhaza abalinganiselwa ku-400 kulolu cwaningo lokushayela izindiza e-CSIR campus kanye

nama-1000s ngaphezulu kusuka ezifundweni ezifanayo eziqhubekayo noma eseziphothiwe kwamanye

amazwe emhlabeni jikelele kubandakanya i-UK ne-USA.

I-gut microbiome:

I-microbiome yomuntu isho ukuqoqwa kwama-microorganisms (amabhaktheriya, isikhunta, amagciwane njll)

aguquke nabantu ukuze bahlanganyele ndawonye ezindaweni eziningi emzimbeni womuntu njengamathumbu

akho, umlomo, isikhumba, amaphaphu njll. amaseli egciwane emzimbeni womuntu ojwayelekile adlula

awabantu, ngokuhlukahluka kofuzo okuhambisana nakho okuholele ekutheni i-microbiome yomuntu ibizwa

ngokuthi 'yi-genome yesibili'.

Ama-bacteria womgudu wamathumbu womuntu (i-GIT, okungokuthi isisu namathumbu) ikakhulukazi ahlala

inani elikhulu lamagciwane. Ukoloni lwe-GIT yilawa mabhaktheriya empilweni yokuqala kukhonjiswe

njengokubalulekile ekuthuthukiseni amasosha omzimba nokusebenza komzimba, ngenkathi empilweni yabantu abadala, i-gut microbiome ixhunyaniswe nemiphumela eminingi yezempilo, nokuphazamiseka Inani lamabhaktheriya “eliwumgogodla” elihlobene nezifo nezimpawu ezahlukahlukene, ezifana nesifo samathumbu esibuhlungu, ukungezwani kokudla njengokungabekezelelani kwe-gluten, ukukhuluphala, isifo sikashukela, isifuba somoya, ukuphazamiseka kwengqondo kanye nesifo senhliziyo ukusho nje ezimbalwa.

Inhloso yocwaningo:

Ukuchazwa kwe-gut microbiome, ngokuqoqwa kwamasampula endle kanye nokuhlonza izakhi zofuzo zezinhlobo zamagciwane, kungasiza abacwaningi ukuthi baqale ukuqonda ubudlelwane obuphakathi kokwakheka kwe-microbiome kanye nempilo nezifo. Inhloso yalolu cwaningo ukuhlola ngokunembile umehluko phakathi kwezinhlobo zamagciwane wegciwane akhona kubantu abahlukene nokuthi ngabe lokhu kwehluka kungabangelwa indlela ethile yokuphila, ukudla, impilo, ubudala noma ukuvezwa kwemvelo (okwaziwa njengemethadatha). Imiphumela izosetshenziselwa ukudala i-database yedatha yezakhi zofuzo kanye nemethadatha emayelana nomhlanganyeli onikezela isampula, engasetshenziswa abanye abacwaningi ukuqhathanisa lapho befunda uhlobo olufanayo lwesampula kwezinye izifundo zesayensi esibizifo ezithile lapho ukujwayeleka kwamathumbu kujwayelekile. Lolu cwaningo luyisinyathelo esibalulekile kubantu baseNingizimu Afrika ukuze bakwazi ukuqonda ubudlelwano phakathi kwamathumbu amabhaktheriya ethu, izindlela zethu zokuphila kanye nemvelo futhi ungaba yingxenyane yalokhu. Ngokwengeziwe, bonke ababambiqhaza bazothola umbiko wempendulo ngokuqhathanisa iphrofayili yakho yesisu nabanye ababambiqhaza, kanye nabahlanganyeli abavela ezifundweni ezifanayo emhlabeni wonke, kufaka phakathi iNyakatho Melika kanye neYurophu.

Izinqubo zokufunda:

Uma ungathanda ukuvolontiya ukubamba iqhaza kulolu cwaningo, sizokucela ukuthi wenze okulandelayo:

1. Gcwalisa uhlu lwemibuzo oluyisisekelo oluku-inthanethi maqondana neminingwane yezokwelapha, amasiko, imvelo yakho nendlela ophila ngayo. Le nhlobo kufanele ithathe imizuzu engama-35 ukuphuthula futhi ingaqedwa ngezikhathi eziningi. Imininingwane yakho izodalulwa futhi uzonikezwa ibhakhodi ehlukele.

2. Usebenzisa le bhakhodi, ungafika lapho sima khona e-Knowledge Commons uzolanda isampuli yakho yokuqoqa isampula enamagilavu, ishushu lokuqoqa, hammock yangasese, ipheshana lokufundisa kanye nesixhumanisi sokwesekwa online.

3. Ngemuva kwalokho ungabuka okokufundisa okuqoqiwe kwesampula online (<https://www.youtube.com/watch?v=a9WXUZNyrgg>) bese usebenzisa i-leaflet yolwazi ukuqoqa kalula isampula lakho elilodwa lesampula.

4. Uzobe usubuyisa ishuhhu lokuqoqa isampula endaweni yethu yokuma e-Knowledge Commons bese kuthi isampula lakho ligcinwe elabhorethri yethu ye-CSIR.

5. I-DNA izokhishwa kusampula futhi ikhuliswe yi-PCR (polymerase chain reaction) bese ilandelwa ukuze ibone ukuthi yimaphi amabhaktheriya akhona nokuthi angakanani esampula sakho.

6. Imiphumela yokulandelana icutshungulwa ngepayipi lethu le-bioinformatics lokuhlonda izinhlobo zebhaktheriya kanye ne-quantification. Le phrofayili ye-microbial izoxhunyaniswa nohlu lwakho lwemibuzo ngokusebenzisa ibhakhodi eyingqayizivele esiyihlinzekile ekuqaleni.

7. Idatha engaziwa izogcinwa ku-database ephephile futhi iyohlaziywa ukuze kutholakale izixhumanisi ezingaba khona phakathi kokuhlukahluka okuhlukahlukene kanye ne-microbiome yabahlanganyeli ocwaningweni.

8. Uma nje isifundo sesiphothuliwe, sizohlinzeka ngemibiko yomuntu ngamunye kubo bonke ababambiqhaza. Thina linganisela ukuthi kuzothatha izinyanga eziyi- ~ 6 ukuthi ufunde imiphumela yesilinganiso sokuqala sokuhlukahluka kwamagciwane.

Izingozi zokubandakanyeka esifundweni:

Azikho izingozi zokubandakanyeka kulolu cwaningo kubahlanganyeli. Njengokusetshenziswa okuvamile kwezindlu zangasese, sicela uqinisekise ukuthi ugeza izandla zakho kahle emva kokuqoqwa kwesampula nokuthi ulahla imfucuza nezinto zekithi njengoba kuchaziwe epheshaneni nakwizixhumanisi zabezindaba ezikulelipheshana. Sicela usebenzise amagilavu kanye ne-spatula enikezwe ikhithi ngesikhathi senqubo yokuqoqa futhi ungaphathi udoti ngesandla futhi ungagcini isampula le-fecal efrijini noma efrijini lakho. Amasu okusampula asetshenziselwe iminyaka eyi-10 ngaphandle kwemiphumela emibi ebikiwe. Asihloli noma iyiphi i-DNA yomuntu engaba kusampula ukuze imininingwane yomuntu mayelana ne-genome yakho ingatholakali. Yonke idatha efakwe ku-database yethu izokuhlungwa ngemininingwane eyaziwayo yokulandelana kwabantu ngaphambi kokufakwa.

Izinzuzo zokuba sesifundweni:

Ayikho inzuzo eqondile kuwe ngokubamba iqhaza kulolu cwaningo. Sikholwa ukuthi kungaba nentshisekelo engokwemvelo yokwazi ukuthi yini amagciwane esampula sakho nokuthi lokhu kuqhathaniswa kanjani nabanye abantu bobulili nobudala obufanayo baseNingizimu Afrika nasemhlabeni jikelele. Abaphenyi, noma kunjalo, bazofunda kabanzi nge-microbiome yomuntu empilweni nasezifweni futhi banikeze insiza ebalulekile kwabanye abacwaningi kwezinye izifundo. Ngaphezu kwalokho, impumelelo yalolu cwaningo lokushayela izindiza ingavumela abacwaningi ukuthi basungule ucwaningo olubanzi kulo lonke elaseNingizimu Afrika elinikela kuphrojekthi ye-microbiome yaseNingizimu Afrika.

Inkokhelo yokubamba iqhaza:

Ngeke unxeshelwe ngokwezimali kulolu cwaningo futhi ngeke zibe khona izindleko zakho ngokubamba iqhaza. Ukugcinwa Kuyimfihlo: Noma yiluphi ulwazi olutholakala maqondana nalolu cwaningo futhi olungakhonjwa nawe luzohlala luyimfihlo futhi luzodalulwa kuphela ngemvume yakho noma njengoba kudingwa ngumthetho. Imfihlo izogcinwa ngokusebenzisa ukukhomba ababambiqhaza besebenzisa uhlelo oluyingqayizivele lokubhaka ukuxhumanisa imethadatha yababambiqhaza nesampula labo. Yonke imininingwane eqoqiwe izogcinwa kulwazi lwasendaweni oluphephile futhi itholwe kuphela ngabaphenyi abagunyaziwe. Igama lakho nemininingwane yakho iyohlala iyimfihlo ngaso sonke isikhathi. Ngokusayina ifomu lokuvuma uzobe usivumela ukuthi silandelelanise ama-nucleic acid (i-DNA / RNA) nama-metabolites akhishwe kusampula yakho ye-faecal ukukhomba izinhlobo zamagciwane kanye nenombolo yazo ekhona emathunjini akho. Ngeke uzuze emiphumeleni. Amasampula akho akhonjwe ngokuphelele kusukela ekuqaleni kwenqubo. Imininingwane evela kuhlu lwemibuzo kanye nedatha yezinhlobo zamagciwane yiyona kuphela imininingwane efinyeleleka kubaphenyi, hhayi imininingwane yakho (igama, imininingwane yokuxhumana njll.) Akekho kubaphenyi abathintekayo kunoma yisiphi isigaba sokucutshungulwa kwesampula nezinyathelo zokulandelana. ukufinyelela emininingwaneni yakho noma ubuwena (ama-ID wethimba ahlukile kuphela). Senze yonke imizamo ukuqinisekisa ukuthi awukwazi ukukhonjwa kusuka kwimininingwane oyinikeza ngawe kepha ugcina imininingwane ebucayi njengobulili, ubudala ngaphandle kokuyekethisa imininingwane yakho yangasese noma ubuqotho bedatha. I imininingo egciniwe egcina le webhusayithi kanye nemininingwane yakho izofakwa ngaphakathi kwekhempasi elawulwa yi-CSIR, izobethelwa futhi yenziwe isipele njalo. Idatha ekhonjwe nge-De (imininingwane yokulandelana kanye nemibuzo kodwa hhayi igama nemininingwane yokuxhumana) izonikezwa ithimba le-data analytics ukuze lihlaziye. Isampula lakho lingagcinwa elabhorethri ye-CSIR BIG isikhathi esingangezinyanga ezimbili ngaphambi kokuthi licutshungulwe kanye nenqwaba yamanye amasampula. Noma yimaphi amasampula

amaningi / asele azolahlwa ngokushesha kulandela isinyathelo sokukhishwa kwe-DNA. Isampula lakho lizosetshenziselwa lolu cwaningo kuphela futhi ngaphansi kwemigomo yemvume enikezwe kulo mbhalo.

Uyacelwa uqaphele: Ukulandelana akwenziwanga ngezinhloso zokuxilonga futhi akuqondisi i-DNA yomuntu.

Ukubamba iqhaza nokuhoxa

Ukubamba iqhaza kungokuzithandela futhi ungakhetha ukuthi ube kulolu cwaningo noma cha. Uma uzithandela ukuba kulolu cwaningo, ungahoxa nganoma yisiphi isikhathi ngaphandle kwemiphumela yanoma yiluphi uhlobo. Abaphenyi bangasikhipha isampula sakho kulolu cwaningo uma kuphakama izimo ezifuna ukwenze njalo. Lokhu kufaka phakathi izimo lapho ubuqotho besampula yakho bonakaliswe khona. Uma uthatha isinqumo sokuthi awusathandi ukuqhubeka kulolu cwaningo, uzocelwa ukuthi uthinte Abaphenyi nge-imeyili ukusazisa ngenhloso yakho yokuhoxa.

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Amalungelo ezifundo zocwaningo

Ungayihoxisa imvume yakho noma kunini futhi uyeke ukubamba iqhaza ngaphandle kwenhlawulo. Awudeli

noma yiziphi izimangalo zomthetho, amalungelo noma amakhambi ngenxa yokubamba kwakho iqhaza kulolu

cwaningo. Uma unemibuzo maqondana namalungelo akho njengesifundo socwaningo, thintana noDkt

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Lezocwaningo

Nokuthuthukiswa.

Imininingwane yokuxhumana nomphathi kanye nosihlalo weHREC - yokubika ngezikhhalazo / izinkinga: Lolu cwaningo luvunyiwe yiKomidi Lokuziphatha Kwabantu Lokucwaninga (Ezokwelapha)

lase-University of the Witwatersrand, eGoli ("Committee"). Umsebenzi oyinhloko waleli Komidi ukuvikela amalungelo nesithunzi sazo zonke izifundo zabantu ezivuma ukubamba iqhaza kuphrojekthi yocwaningo kanye nobuqotho bocwaningo. Uma kukhona onakho ukukhathazeka ngendlela isifundo esenziwa ngayo, sicela uthinte uSihlalo waleli Komidi onguSolwazi Clement Penny, ongathintwa ku: inombolo yocingo 011 717 2301, noma nge-imeyili kuClement.Penny@wits.ac.za. Izinombolo zocingo weKomithi likanobhala kukhona 011 717 2700/1234 kanye Amakheli e-imeyili kukhona Zanele.Ndlovu@wits.ac.za futhi Rhulani.Mukansi@wits.ac.za.

IMINININGWANE NGENHLA YACACISWA KIMI, UMBHANGASISI OBHEKENE NOLIMI NGIYALELA.
Ngiyavuma ngokuzithandela ukubamba iqhaza kulolu cwaningo:

- Yebo
 Cha

Uyacelwa uqaphele: Ngemibuzo elandelayo maqondana nesampula nemvume ye-DNA, sidinga imvume

("yebo") ukuze siqhubekele ocwaningweni. Uma impendulo yakho ingu "cha", lokhu kusho ukuthi imvume ayinikezwanga futhi iwindi lizovala.

Yonke imibuzo ihambisana nephepha lemininingwane nemvume futhi livunyiwe yikomidi le-Wits Health Sciences Medical Research Ethics.

Ngiyabonga.

Isifundo se-CSIR Microbiome Mapping Initiative - Isampula Lemvume Yesampula
Ngiyavuma ukuba yingxenywe yalolu cwaningo. Ngiyakuqonda ukuthi isifundo sizobandakanya ukuqoqwa kwamasampula nokuthi imininingwane nezinhloso zalolu cwaningo ngichazelwe yona. Ngiyakuqonda ukuthi nginelungelo lokwenqaba ukubamba iqhaza ocwaningweni. Ngiyavuma ukuthi yonke inqubo / ukuhlolwa kwamasampuli sekuvunyelwe noma kuzophasiswa yiKomidi Lokuziphatha Kwezocwaningo Lwabantu eNyuvesi yaseWitwatersrand. Ngiyavuma ukunikeza isampula le-faecal

- Yebo
 Cha

Isifundo se-CSIR Microbiome Mapping Initiative - Ishidi Lokuvuma le-DNA Ngiyavuma ukuba yingxenywe yalolu cwaningo. Ngiyavuma ukuthi yonke inqubo / ukuhlolwa kwamasampuli e-DNA agciniwe kuvunyelwe noma kuzophasiswa yiKomidi Lokuziphatha Kwabantu LeNyuvesi yaseWitwatersrand.

- Yebo
 Cha

Ngiyavuma ukuthi i-DNA yami igcinwe futhi isetshenziselwe izinjongo ezichazwe ngenhla.

- Yebo
 Cha

Ngiyavuma ukuthi idatha etholakala kwi-DNA yami ingenziwa itholakale esizindeni somphakathi ngaphandle kwezikhombi.

- Yebo
 Cha

Ngiyakuqonda ukuthi njalo uma kwenziwa ucwaningo olusha nge-DNA yami, kuzotholakala imvume ekomitini lezimiso zokuziphatha zocwaningo ukuze kuqinisekise ukuthi lisetshenziselwa izinjongo ezibalulwe ngenhla kuphela.

- Yebo
 Cha

Ngiyakuqonda ukuthi ngeke ngizuze ngqo ocwaningweni olwenziwe kwi-DNA yami.

- Yebo
 Cha

Ngiyaqonda ukuthi ngingahoxa esifundweni nganoma yisiphi isikhathi.

- Yebo
 Cha

Sicela unikeze igama lakho ngezansi (lolu lwazi luzotholakala kuphela kumcwaningi futhi luzokhonjwa futhi luhlale lungaziwa ocwaningweni)

Isiginesha

Idethi nesikhathi:
