

# 1. General information

## Grant application title

**Large-Scale Data Science and Artificial Intelligence Infrastructure for Knowledge Discovery in the Green Life Sciences (KD-BIO)**

## Consortium lead and other consortium partners

Wageningen University & Research (WUR) – responsible institution  
 University of Utrecht (UU) – involved institution  
 University of Amsterdam (UvA) – involved institution  
 Westerdijk Fungal Biodiversity Institute (WI-KNAW) – involved institution  
 Netherlands Institute of Ecology (NIOO-KNAW) – involved institution  
 Leiden University Medical Center (LUMC) – involved institution  
 Jan Ingenhousz Institute (JII) – involved institution

## Main applicant

<b>Name (Titles, First name, Initials, Surname)</b>	<b>Prof Dr. Ricardo da Silva Torres</b>
<b>Address for correspondence</b>	Droevendaalsesteeg 1, 6708 PB Wageningen
<b>Email</b>	ricardo.dasilvatorres@wur.nl
<b>Phone number</b>	+31317480063
<b>Website of the Large-scale Research Infrastructure (LSRI)</b>	<a href="http://www.wur.nl/KD-BIO">www.wur.nl/KD-BIO</a>

## Consortium

Title, first name, initials, surname	Affil.	Expertise	ORCID/website/DAI/other	Role(s)
<b>Main applicant</b>				
<b>Prof Dr R. (Ricardo) Torres</b>	WUR	Data Science (DS), Artificial Intelligence (AI)	<a href="https://orcid.org/0000-0001-9772-263X">0000-0001-9772-263X</a>	WP1 leader, WP7 leader
<b>Co-applicant(s)</b>				
<b>Prof. Dr W. (Wieland) Meyer</b>	WI-KNAW	Medical Mycology, Biodiversity Data, Biobanking	<a href="https://orcid.org/0000-0001-9933-8340">0000-0001-9933-8340</a>	WP2 leader, MALDIBANK/MIRRI-ERIC, BIOTECH4.0, ARISE
<b>Prof. Dr. M. (Maria) Suarez-Diez</b>	WUR	Systems and Synthetic biology	<a href="https://orcid.org/0000-0001-5845-146X">0000-0001-5845-146X</a>	WP3 leader, Liaison ELIXIR-NL
<b>Prof. Dr. B. (Bedir) Tekinerdogan</b>	WUR	Software Eng., Systems Eng., AI	<a href="https://orcid.org/0000-0002-8538-7261">0000-0002-8538-7261</a>	WP4 leader
<b>Dr. Z. (Zhiming) Zhao</b>	UvA	Cloud Computing, VRE, Blockchain	<a href="https://orcid.org/0000-0002-6717-9418">0000-0002-6717-9418</a>	WP5 leader
<b>Prof. Dr. A. (Anna) Fensel</b>	WUR	Semantic Technologies	<a href="https://orcid.org/0000-0002-1391-7104">0000-0002-1391-7104</a>	WP6 leader
<b>Prof. Dr. S. (Sanne) Abeln</b>	UU	AI, DS, Bioinformatics	<a href="https://orcid.org/0000-0002-2779-7174">0000-0002-2779-7174</a>	WP8 leader
<b>Dr. G. (Geerten) Hengeveld</b>	NIOO-KNAW	Digital Twins, Ecological Modelling	<a href="https://orcid.org/0000-0002-9592-3080">0000-0002-9592-3080</a>	Liaison LTER-LIFE, Use case contributor
<b>Dr. M. (Magnus) Palmblad</b>	LUMC	Bioinformatics	<a href="https://orcid.org/0000-0002-5865-8994">0000-0002-5865-8994</a>	WP contributor, Liaison ELIXIR-NL
<b>Co-funder(s)</b>				
<b>Prof. Dr. D. (David) Kramer</b>	JII	Photosynthesis	<a href="https://orcid.org/0000-0003-2181-6888">0000-0003-2181-6888</a>	Use case leader
<b>Cooperation partner(s)</b>				
<b>A. (Auke) Damstra</b>	CropXR	Technology Director	<a href="http://cropxr.org/">cropxr.org/</a>	Liaison CropXR
<b>Dr. H. (Hans) Roubos</b>	DSM-firmenich	Data Science	<a href="http://www.dsm-firmenich.com">www.dsm-firmenich.com</a>	Liaison DSM-firmenich
<b>Dr. N. (Nel) Zoon</b>	NIZO	Chief scientific officer	<a href="http://www.nizo.com/team/nel-zoon/">www.nizo.com/team/nel-zoon/</a>	Liaison NIZO

<b>Dr. B. (Bas) Teusink</b>	Holomicrobiome Institute	Systems Biology	<a href="https://www.holomicrobiome.nl/">0000-0003-3929-0423</a>	Liaison Holomicrobiome Institute
<b>Drs. E. H. (Liesbeth) Luijendijk</b>	One-Planet Research Center	Data & algorithm exchange platforms, Digital Twins	<a href="https://www.oneplanetresearch.nl/">www.oneplanetresearch.nl</a>	Liaison OnePlanet
<b>Subcontractors</b>				
<b>Dr. R. (Ruben) Kok</b>	Health-RI	Chief Strategic Alliances	<a href="https://www.health-ri.nl/">www.health-ri.nl/</a>	Liaison Health-RI
<b>Dr. J.R. (Janet) Vos</b>	Health-RI	Node coordinator	<a href="https://www.health-ri.nl/">0000-0001-8802-7002</a>	Liaison Health-RI, Liaison ELIXIR-NL
<b>Drs. R. (Ron) M. Augustus</b>	SURF	CEO a.i. at SURF	<a href="https://www.surf.nl/over-ron-augustus">www.surf.nl/over-ron-augustus</a>	Liaison SURF
<b>Dr. C. (Colette) Bos</b>	eScience Center	Programme Director	<a href="https://www.esciencecenter.nl/team/colette-bos/">www.esciencecenter.nl/team/colette-bos/</a>	Liaison eScience Center
<b>Scientific Partners</b>				
<b>Prof. Dr. M. (Mark) Aarts</b>	WUR	Genetics	<a href="https://www.wur.nl/en/0000-0001-5257-0740">0000-0001-5257-0740</a>	Liaison NPEC, Use case leader
<b>Prof dr. D. (Dick) de Ridder</b>	WUR	Bioinformatics, machine learning	<a href="https://www.wur.eu/bif">0000-0002-4944-4310</a> <a href="https://www.wur.eu/bif">https://wur.eu/bif</a>	Liaison CropXR
<b>Prof. Dr. H. (Hauke) Smidt</b>	WUR	Microbiology, microbiome	<a href="https://www.wur.nl/en/0000-0002-6138-5026">0000-0002-6138-5026</a>	Liaison UNLOCK
<b>Prof. Dr. E. (Erik) van der Linden</b>	WUR	Physics, Physical chemistry, Food Sciences	<a href="https://www.wur.nl/en/personen/erik-van-der-linden.htm">https://www.wur.nl/en/personen/erik-van-der-linden.htm</a>	Use case leader
<b>Prof. Dr. JP (Jean-Paul) Vincken</b>	WUR	Food chemistry, Food technology	<a href="https://www.wur.nl/en/0000-0001-8540-4327">0000-0001-8540-4327</a>	Use case contributor
<b>Prof. Dr. MH (Marcel) Zwietering</b>	WUR	Bacteriology, Food microbiology, Food quality and safety	<a href="https://www.wur.nl/en/0000-0003-2704-5690">0000-0003-2704-5690</a>	Use case contributor
<b>Prof. Dr. KA (Kasper) Hettinga</b>	WUR	Food quality and safety, Food sciences	<a href="https://www.wur.nl/en/0000-0002-9017-4447">0000-0002-9017-4447</a>	Use case contributor
<b>Prof. Dr. RM (Remko) Boom</b>	WUR	Food and bioprocess eng., Food sciences	<a href="https://www.wur.nl/en/0000-0003-2877-4166">0000-0003-2877-4166</a>	Use case contributor
<b>Prof. Dr. V. (Vincenzo) Fogliano</b>	WUR	Food sciences, Food quality	<a href="https://www.wur.nl/en/0000-0001-8786-9355">0000-0001-8786-9355</a>	Use case contributor
<b>Prof. Dr. M. (Marten) Scheffer</b>	WUR	Ecology, Complex Systems	<a href="https://www.wur.nl/en/0000-0002-2100-0312">0000-0002-2100-0312</a>	Use case contributor
<b>Prof. Dr. V. (Viola) Willemsen</b>	WUR	Plant Molecular Biology	<a href="https://www.wur.nl/en/0000-0002-6420-0605">0000-0002-6420-0605</a>	Use case contributor, Liaison NPEC
<b>Prof Dr. I. (Ioannis) Athanasiadis</b>	WUR	Data Science and Artificial Intelligence	<a href="https://www.wur.nl/en/0000-0003-2764-0078">0000-0003-2764-0078</a>	WP7 contributor
<b>Prof. Dr. V. (Vitor) Martins dos Santos</b>	WUR	Biomanufacturing, Digital Twins, Industrial Biotech.	<a href="https://www.wur.nl/en/0000-0002-2352-9017">0000-0002-2352-9017</a>	Use case leader, Liaison IBISBA and ELIXIR
<b>Prof. Dr. F. (Fred) van Eeuwijk</b>	WUR	Statistics	<a href="https://www.wur.nl/en/0000-0003-3672-2921">0000-0003-3672-2921</a>	WP7 contributor
<b>Dr. J. (Jascha) Grübel</b>	WUR	Data science and AI	<a href="https://www.wur.nl/en/0000-0002-6428-4685">0000-0002-6428-4685</a>	WP4 contributor
<b>Dr. N. (Nandika) Tsendbazar</b>	WUR	Remote Sensing, Land Use	<a href="https://www.wur.nl/en/0000-0002-4825-1971">0000-0002-4825-1971</a>	Use case contributor
<b>Dr. M. (Marc) Rußwurm</b>	WUR	Remote Sensing, Data science and AI	<a href="https://www.wur.nl/en/0000-0001-6612-5744">0000-0001-6612-5744</a>	Use case contributor
<b>Dr. R. (Rene) Geurts</b>	WUR	Plant Molecular Biology	<a href="https://www.wur.nl/en/0000-0002-6443-2289">0000-0002-6443-2289</a>	Use case contributor
<b>Dr. M. (Michael) Schon</b>	WUR	Bioinformatics, Plant Molecular Biology	<a href="https://www.wur.nl/en/0000-0002-4756-3906">0000-0002-4756-3906</a>	Use case contributor
<b>Dr. I. (Ingrid) van de Leemput</b>	WUR	Aquatic ecology, dynamic systems	<a href="https://www.wur.nl/en/0000-0003-0155-370X">0000-0003-0155-370X</a>	Use case leader

<b>Dr. B. (Bas) Kemp</b>	WUR	Adaptation physiology, precision livestock	<a href="https://orcid.org/0000-0002-9765-9105">0000-0002-9765-9105</a>	Use case leader
<b>Dr. A. (Ali) Youssef</b>	WUR	Adaptation physiology, precision livestock	<a href="https://orcid.org/0000-0002-9986-5324">0000-0002-9986-5324</a>	Use case leader
<b>Dr. JJ (Jasper) Koehorst</b>	WUR	Bioinformatics, Semantic Technologies	<a href="https://orcid.org/0000-0001-8172-8981">0000-0001-8172-8981</a>	Use case contributor
<b>Prof. Dr. G. (George) Kowalchuk</b>	UU	Microbial ecology	<a href="https://orcid.org/0000-0003-3866-0832">0000-0003-3866-0832</a>	Liaison NPEC
<b>Prof. Dr. Berend Snel</b>	UU	Bioinformatics, Big Data, Evolut. Biology	<a href="https://orcid.org/0000-0002-5804-8547">0000-0002-5804-8547</a>	Technical expert
<b>Prof. Dr. G. (Guido) van den Ackerveken</b>	UU	Genomics of plants, bioinformatics, microbiology	<a href="https://orcid.org/0000-0002-0183-8978">0000-0002-0183-8978</a>	Liaison CropXR
<b>Dr. B. (Basten) Snoek</b>	UU	Bioinformatics, data science, genetics, microbial ecology	<a href="https://orcid.org/0000-0001-5321-2996">0000-0001-5321-2996</a>	WP8 contributor, technical expert
<b>Dr. R. (Roeland) L. Berendsen</b>	UU	Microbial ecology, microbiology, genetics	<a href="https://orcid.org/0000-0003-2707-8919">0000-0003-2707-8919</a>	Liaison NPEC, Use case co-leader
<b>Dr. R. (Ronnie) de Jonge</b>	UU	Bioinformatics, microbial genomics, applied data science	<a href="https://orcid.org/0000-0001-5065-8538">0000-0001-5065-8538</a>	WP8 contributor, Use case contributor
<b>Dr. W. (Wilson) J. dos Santos Silva</b>	UU	Explainable AI, privacy-preserving AI	<a href="https://scholar.google.com/citations?user=...">Google Scholar</a>	WP8 contributor
<b>Dr. B. (Balázs) Brankovics</b>	WI-KNAW	Data Science	<a href="https://orcid.org/0000-0003-0536-7787">0000-0003-0536-7787</a>	Use case leader
<b>Dr. D. (Duong) Vu</b>	WI-KNAW	AI expert	<a href="https://orcid.org/0000-0001-7960-2765">0000-0001-7960-2765</a>	Use case contributor
<b>Dr. G. (Gerard) Verkleij</b>	WI-KNAW	Culture Collection Curator – filamentous fungi	<a href="https://www.researchgate.net/profile/Gerard-Verkleij">https://www.researchgate.net/profile/Gerard-Verkleij</a>	Use case contributor
<b>Dr. M. (Marizeth) Groenewald</b>	WI-KNAW	Culture Collection Curator - yeasts	<a href="https://orcid.org/0000-0003-0835-5925">0000-0003-0835-5925</a>	Use case contributor
<b>Dr. J. (Jos) Houbraken</b>	WI-KNAW	Food security expert	<a href="https://orcid.org/0000-0003-4893-4438">0000-0003-4893-4438</a>	Use case contributor
<b>Prof. Dr. R. (Ronald) de Vries</b>	WI-KNAW	Fungal physiology expert	<a href="https://orcid.org/0000-0002-4363-1123">0000-0002-4363-1123</a>	Use case contributor
<b>Prof. Dr. A. J. (Aalt-Jan) Van Dijk</b>	UvA	Plant Systems Biology	<a href="https://orcid.org/0000-0002-8872-5123">0000-0002-8872-5123</a>	Use case contributor
<b>Implementation Partners</b>				
<b>Dr. W.J. (Willem Jan) Knibbe</b>	WUR	Data Science and Artificial Intelligence	<a href="https://orcid.org/0000-0002-7177-9352">0000-0002-7177-9352</a>	Liaison Wageningen Data Competence Center