

In November 2021, the World Health Organization (WHO) issued a call for experts ([link](#)).

Following a thorough review of all applications, WHO is considering the following experts to form part of Guideline Development Group (GDG) on treatment of patients with cystic echinococcosis.

A short biography of each member under consideration is available below:

1) Professor Okan Akhan

Professor Okan Akhan is professor of Radiology at Radiology Department at Hacettepe University in Ankara, Turkey. He is a member of five international Radiology Associations and national societies in the field of Radiology.

Professor Akhan jointly founded the Turkish Society of Interventional Radiology with colleagues and served as its president between 2001 and 2005. He was again elected as President in 2008 until the end of 2010. Dr. Akhan also served as chief editor of the “Diagnostic and Interventional Radiology” Journal from 2001 to 2010 and formed part of the editorial board and referee for several international journals. He is the recipient of several awards.

He was honored as a ‘fellow’ of the Cardiovascular and Interventional Radiological Society of Europe (CIRSE) and as a Honorary Fellow of the European Society of Gastrointestinal and Abdominal Radiology. He co-chairs WHO’s Informal Working Group on Echinococcosis (WHO-IWGE) and has authored/co-authored over 216 articles published in peer-reviewed journals and has given more than 160 lectures. He is also one of the founders of Human Rights Foundation of Turkey where he served as Board Member in 1990 -2011.

2) Dr Jaime Altcheh

Dr. Jaime Altcheh is a pediatrician and parasitologist at the University of Buenos Aires and in the Buenos Aires Children’s Hospital in Argentina.

Dr Altcheh is involved in several collaborations with national and international research centers and forms part of joint projects to study basic and clinical aspects of parasitic diseases. He also served as an expert advisor to the Pan American Health Organization (PAHO), WHO, DNDi, and the Ministry of Health, Argentina and participated in the development of PAHO/WHO diagnosis and treatment guidelines for different parasitic diseases.

Dr Altcheh was also part of a clinical study on the impact of medical treatment of abdominal hydatid cyst that demonstrated the efficacy of this approach and modified the schedule of treatment avoiding several surgeries in children.

3) Dr Mohammad Sayed Behrad

Dr. Mohammad Sayed Behrad is a thoracic surgeon at the Thoracic and Cardiovascular Diseases Institute at the Ghalib University Medical Science Faculty Kabul in Afghanistan.

He has several years’ experience in treating patients with cystic echinococcosis and has performed many thoracic and abdominal surgeries, including removal of hydatid cysts from lungs, liver, thyroid gland, breasts.

Dr Behrad jointly founded the Ghalib University in Kabul, Afghanistan and the 45th center for CE research that collected samples for genotyping as first attempt in understanding the CE status of Afghanistan. He is passionate about sharing his experience and teaching the subject of lungs hydatid cyst to students of the Kabul University of Medical Science (KUMS).

Dr Behrad studied medicine at KUMS and has been working as a general surgery specialist for more than 20 years in Wazir Akbar Khan and Aliabad teaching in hospitals affiliated to the university.

4) Professor Mustapha Benazzouz

Professor Mustapha Benazzouz is professor of Hepato-Gastroenterology from Rabat Medical School within Mohamed V University in Rabat, Morocco. He served as General Secretary of the Moroccan Society of Hepato-Gastroenterology and Vice President of the Moroccan Society of Endoscopy. He is also a member of the Moroccan Society of Gastro-Enterology and the European Society of Hepatology and has held the position of Vice General Secretary for the Moroccan Society of Medical Science in the past.

Professor Benazzouz jointly founded the Mediterranean Association for the Study of Liver. Since 2009 he is the president of the Continuing Medical Education (CME) commission for Hepato-Gastroenterology. He is also a member of the WHO Informal Working Group on Echinococcosis.

As an expert in percutaneous and endoscopic treatment, he introduced the percutaneous treatment in Morocco in 1995. He is actively involved in endoscopic treatment of complicated hydatid cysts and has a thorough knowledge as practitioner from a country with limited resources where cystic echinococcosis is still common.

5) Dr Bolor Bold

Dr. Bolor Bold is medical doctor and epidemiologist who has worked in Mongolia's capacity-building projects to strengthen the inter-sectoral surveillance, response of zoonotic and vector-borne diseases.

As researcher at the Mongolian National Center for Zoonotic Disease (NCZD), Dr Bold's work in CE since 2012 involved reviewing hospital records, interviewing patients, health professionals among nomadic pastoral communities in Mongolia.

Since 2014, she started to work on implementation of the diagnostic and treatment recommendation for CE developed by the WHO informal Working Group. During her doctoral study, she co-organized and coordinated two hands-on trainings on CE management in rural hospitals and several inter-disciplinary stakeholder's workshops between human and animal health sectors on control of CE in Mongolia. In 2018, she worked for WHO as a consultant in developing the draft action plan for the control of CE in Mongolia.

In 2018, she completed her doctoral thesis at Swiss Tropical and Public Health Institute in clinical management of cystic echinococcosis.

6) Dr Enrico Brunetti

Dr. Enrico Brunetti is co-Director of WHO Collaborating Centre for the Clinical Management of Cystic Echinococcosis in Italy and Associate Professor of Infectious Diseases at the University of Pavia and staff physician at San Matteo Hospital Foundation in Pavia. Dr Brunetti has worked on the clinical management

of cystic echinococcosis for 27 years and his expertise includes the use of clinical ultrasound in infectious diseases in tropical settings, especially HIV, tuberculosis, and parasitic diseases.

He participated in developing the protocol of ultrasound-guided treatment of echinococcal cysts (Puncture, Aspiration, Injection, Re-aspiration-PAIR) and has organized workshops and other international collaborations within the Framework of Agreement between the University of Pavia and the WHO on Minimally Invasive treatment of CE.

Dr Brunetti is a member of the WHO Informal Working Group on Echinococcosis and among the main authors of the Expert Consensus on CE and AE (Acta Trop, 2010). He has ongoing research and training collaborations with institutions in several countries. To date, he has organized sixteen International Short Courses on Ultrasound in Tropical Medicine, in collaboration with WHO and the American Society of Tropical Medicine and Hygiene. Dr. Brunetti's has co-authored several peer-reviewed papers on key aspects of diagnosis, treatment, and follow-up of patients with CE and has contributed to the establishment of the European Registry of Cystic Echinococcosis.

7) Professor Peter Chiodini

Professor Peter Chiodini is Consultant Parasitologist at the Hospital for Tropical Diseases; Honorary Professor at the London School of Hygiene & Tropical Medicine; Honorary Clinical Professor at University College London and Director of the UK Health Security Agency (UKHSA) Malaria Reference Laboratory and the UKHSA Parasitology Reference Laboratory.

He is both a pathologist and a physician, with special interests in malaria and echinococcosis, where he uses his background in basic biological sciences and clinical medicine to better understand the behaviour of these diseases.

Professor Chiodini organizes the UK National External Quality Assessment Schemes for parasitology and is a member of the UKHSA Advisory Committee on Malaria Prevention in Travellers and the UK Advisory Committee on Dangerous Pathogens.

He has collaborated with WHO on Chagas disease in non-endemic countries and with the WHO International Working Group on Education on echinococcosis. His research interests include new diagnostic methods for parasitic infections, echinococcosis, malaria, and Chagas disease. In 2018 he was awarded an OBE for services to parasitology and malaria.

8) Professor Christina Coyle

Professor Christina Coyle is a physician in Infectious Disease and has practiced Tropical Medicine for over twenty years in New York City where she serves as the Director of the Clinical Infectious Disease Service at Jacobi Medical Center and Tropical Medicine Clinic in Bronx. She is a full Professor at the Albert Einstein College of Medicine and considered an expert in Tropical Medicine.

Professor Coyle oversees the largest Tropical Medicine Clinic in the United States, which sees over 2000 tropical medicine visits a year. She has managed numerous complicated hepatic echinococcal cases and collaborated closely with the liver transplant services in NYC to create a team that understands best approaches to management of hepatic echinococcus.

Professor Coyle is also a content expert for the U.S Center for Disease and Prevention Control for all complicated cases of echinococcus and is widely recognized as an expert on larval tapeworms, neurocysticercosis, and echinococcus, serving on both national and international committees for this disease.

She is a co-author on "Diagnosis and Treatment of Neurocysticercosis: 2017 Clinical Practice Guidelines by the Infectious Diseases Society of America (IDSA) and the American Society of Tropical Medicine and Hygiene (ASTMH)."

9) Professor John Horton

Professor John Horton is a medical practitioner with nearly 50 years' experience in drug development and public health initiatives. For the last 35 years, he has worked exclusively on Neglected Tropical Diseases and was the moving force behind the tropical disease initiatives at GlaxoSmithKline.

He was involved from an early stage in the development of albendazole, initially as a 'dewormer' but then expanded its use into systemic parasitic diseases such as echinococcosis, ensuring that albendazole was available and then registered for treatment of echinococcosis around the world.

Professor Horton was one of the early members of the WHO Informal Working Group on Echinococcosis. He was also involved in the Global Programme to Eliminate Lymphatic Filariasis (GPELF), having initiated both the original studies that formed the basis of the programme, and the concepts behind the global programme. Although his work has in recent years been more focused on the filarial infections of man, he continues to maintain an active interest in echinococcosis and has continued to publish in the field, particularly on the role of chemotherapy as part of disease management.

10) Professor Thomas Junghanss

Professor Thomas Junghanss is a clinician specialized in Internal Medicine (Subspecialities: Tropical Medicine and Infectious Disease) at Heidelberg University Hospital, Germany.

For more than 20 years, Professor Junghanss' work has spanned interdisciplinary clinic (infectious diseases/ tropical medicine, interventional radiology, abdominal and thoracic surgery, and gastroenterology) for patients with echinococcosis (both cystic and alveolar echinococcosis).

He is also a research fellow at Infectious Diseases & Tropical Medicine Unit, Heidelberg University Hospital.

His research areas are echinococcosis, community-based wound management, Buruli Ulcer, diagnosis and treatment of envenoming and poisoning.

Professor Junghanss is (apl) at Ruprecht-Karls-University Heidelberg and co-chairs WHO's Informal Working Group on Echinococcosis (WHO-IWGE) and is also an Editor for the Journals 'Tropical Medicine & International Health' and Manson's Tropical Diseases.

11) Dr Samson Akichem Lokele

Dr. Samson Akichem Lokele is a trained and registered clinical officer with the Ministry of Health at the Lodwar county in Kenya. He is the eyecare services coordinator in the Turkana county and acts as the

trachoma taskforce focal point and has extensive experience in coordinating activities working together with international partners and non-profit organizations like Fred Hollows Foundation and Sightsavers.

In partnership with the Ministry of Health and Spanish Eye Doctors through the Missionary Community of Saint Paul Apostle under the Turkana Eye Project, Dr Lokele organized eye camps, training of communities on primary eye care through implementation of WHO recommended strategies and conducted mass drug administrations in the county.

His valuable insights and contacts to rural communities informed different surveys, for example in collaboration with the London School of Hygiene and Tropical Medicine, Sightsavers International, World Vision, OXFAM GB, MERLIN and UNICEF.

Dr Lokele holds a diploma in Clinical Medicine and Surgery as well as a degree in Environmental Health and worked as clinical officer before becoming an ophthalmologist surgeon, specialized in surgery in remote and poor regions of Kenya. He became the first surgeon to treat local people with trachoma and gained crucial knowledge in working with rural communities including the need of outreach work, finding new cases, and educating people in how to avoid neglected tropical diseases like trachoma as an important part of public health.

12) Dr Suneetha Narreddy

Dr Suneetha Narreddy is Senior Infectious Disease Specialist working as Senior Consultant as well as Program Director for the Infectious Diseases Fellowship Program at the Apollo Health City Campus, Jubilee Hills in Hyderabad, India.

Certified by the American Board of Internal Medicine, Dr Nareddy is one of the few trained Infectious Diseases consultants in Hyderabad where for more than a decade she has been managing patients with various infectious diseases, including parasitic infections in patients from India and other endemic countries.

Dr Nareddy has worked at country, regional and global levels, contributing to policy formulations, capacity building, program planning and evaluation and disease surveillance.

Having worked in the US, in the private sector in India and in constant interactions with the government sector, she has a holistic understanding of how health systems function in resource poor settings.

Dr Nareddy is part of the executive committee and a founding member of the Clinical Infectious Diseases Society of India as well as member of other international societies like the Infectious Diseases Society of America.

13) Dr Timothy Charles Pennel

Dr Timothy Charles Pennel is a specialist cardiothoracic surgeon and the Head of Division of Cardiothoracic Surgery and Chris Barnard Chair in the Department of Surgery at the University of Cape Town and Groote Schuur Hospital, South Africa. He is also Surgical Director of Heart and Lung Transplantation and Surgical Lead in the Extracorporeal Life Support Program

His research activities include his position as lead scientist for Experimental Surgery in addition to being a Research Associate in the Cardiovascular Research Unit of the University of Cape Town. Dr Pennel is also

Senior Lecturer in the Division of Cardiothoracic Surgery and a member for the transformation and equity committee to implement his vision for transformation within the campus and the discipline of cardiothoracic surgery.

As a cardiothoracic surgeon in a low-middle income country, inflammatory lung disease forms the predominant caseload in Dr Pennel's practice, which also includes hydatid lung disease. He was further involved in several community education courses and workshops.

14) Professor Priscilla Rupali (Methodologist)

Professor Priscilla Rupali works in the Department of Infectious Diseases at Christian Medical College (CMC) Vellore, Tamil Nadu, India.

Professor Rupali runs a popular Clinical Tropical Medicine course at CMC annually and also pioneered the course "Fellowship in General Infectious Diseases" targeting physicians working in secondary/tertiary care settings.

Professor Rupali has also collaborated with Médecins sans frontières (MSF) India and initiated the 'Global Health and Humanitarian Medicine' programme providing high-quality training in tropical medicine and public health to improve patient and programmatic care in low-and-middle-income countries, including humanitarian situations.

She has trained in "Transplant Infectious Diseases" at the Henry Ford Hospital in Detroit, Michigan and been instrumental in establishing transplant-related services in her hospital including founding the Transplant Infectious Diseases Conference in Vellore, Chennai and Ludhiana. The Infectious Diseases Department at CMC Vellore has been a pioneer in promoting infectious diseases as a clinical specialty in India.

15) Dr Marija Stojkovic

Dr. Marija Stojkovic is a Senior physician for Infectious diseases and Tropical Medicine at Heidelberg University Hospital, Germany. She is responsible for the coordination of the clinic for cystic and alveolar echinococcosis and the clinic for familial Mediterranean fever. Part of this includes evaluating, treating and following patients with cystic echinococcosis on a daily basis and weekly radiological conferences with colleagues for own patients and counseling service e.g. registered as echinococcosis expert at CDC, Atlanta.

Since the establishment of an online platform in 2015 over 700 clinical counselling on patients with cystic and alveolar echinococcosis in Germany and abroad could be provided. Her expertise includes patients with particular severity of disease and the discrepancy between treatment modalities in low- and middle-income countries and high-tech settings.

Dr Stojkovic is a member of the WHO informal Working Group on Echinococcosis, of the guidelines committee of the German Society for Tropical Diseases as well as of the Steering committee of the Centre of rare diseases.

16) Dr Francesca Tamarozzi

Dr. Francesca Tamarozzi is a veterinarian and physician, specialist in microbiology and graduate from the Italian Society of Medical Ultrasonology, with long-standing career path in parasitology.

Dr Tamarozzi currently works at the Department of Infectious-Tropical Disease and Microbiology, IRCCS Sacro Cuore Don Calabria Hospital, Negrar, Verona, Italy, WHO Collaborating Centre for Strongyloidiasis and other NTDs.

Her main focus, for over 10 years, has been cystic echinococcosis. She started her work on this topic at the WHO Collaborating Centre for Clinical Management of Cystic Echinococcosis in Pavia, Italy, followed by work at the WHO Collaborating Center for the Epidemiology, Detection and Control of Cystic and Alveolar Echinococcosis (Istituto Superiore di Sanità, Rome, Italy), where she also contributed to the development and coordination of the European Register of Cystic Echinococcosis.

Since 2016 she is part of the steering committee of the WHO Informal Working Group on Echinococcosis, co-leading the “Diagnostic Imaging” and “Watch-and-Wait” working subgroups, and being member of the “Laboratory Diagnosis” and “Medical Treatment” working subgroups.

In the field of echinococcosis her main focus is diagnostics, both in the clinical and in the field epidemiological setting. Her portfolio includes 10 research projects and 71 publications in the field of cystic echinococcosis.

17) Dr Leonardo Uchiumi

Dr. Leonardo Javier Uchiumi is an Argentinean General Surgeon who specializes in hepatobiliary and pancreatic surgery.

Committed to the prevention, diagnosis, and treatment of cystic echinococcosis, Dr Uchiumi actively promotes the use of abdominopelvic ultrasound for early diagnosis of CE as secondary prevention strategy and use of albendazole as first line of treatment according to type, size, numbers and affected organs by CE cysts with a high number of success of patients treated locally.

He has participated in training courses, workshop and Congress and has published papers focused in the Focused Assessment with Sonography for Echinococcosis training course developed in Rio Negro Province as important tool of secondary prevention and for monitoring a control program of CE in the context of working with One Health approach.

Dr Uchiumi is also a national and international consultant in CE for several organizations and Member of Medical Committee of Control Program of CE of Ministry of Health of Rio Negro Province-Argentina (a model of One Health since 1980). He is also a consultant of National Ministry of Health of Argentina and Pan American Health Organization and the first Latin American member of the World Health Organization-Informal Working Group on Echinococcosis.

18) Professor Ning Xiao

Professor Ning XIAO is Deputy Director and Professor of National Institute of Parasitic Diseases at the National Center for Tropical Diseases Research at Chinese Center for Disease Control and Prevention (China CDC).

Professor Xiao was a visiting scholar at the University of Tokyo, Japan during 1997-1998. From 2002-2006, he pursued his PhD at the Asahikawa Medical University with focus on the diagnostic technique of echinococcosis and phylogenetic study of *Echinococcus* species.

Professor Ning Xiao discovered and identified a new *Echinococcus* species - *E. shiquicus* (2015) from the Qinghai-Tibetan plateau of China.

As Principal Investigator or co- Principal Investigator, he has conducted a series of projects funded by China, USA and Japan. Currently he continues to be actively engaged in echinococcosis control in China.

In the past, Professor Ning Xiao worked as technical lead on three international cooperation projects. And, as the Country Director and Team Leader of China CDC for public health technical support based on the Sierra Leone - China Friendship Biosafety Laboratory in Sierra Leone for one year, during which a parasite surveillance laboratory was set up in Sierra Leone.

Professor Ning Xiao has published widely with almost 198 papers and 13 authorized patents. Dr. Xiao is currently part of WHO's Strategic and Technical Advisory Group (STAG) for Neglected Tropical Diseases.