We have arrived to the end of another exciting and fruitful year full of challenges and successes. We have continued our dedication to the travel clinic and global health. We have developed an outstanding care to our patients in travel medicine and provided unique care to patients affected with tropical illnesses. Finally we have continued our mission in clinical research, mentoring and teaching the younger generation of doctors. Happy 2023!

Andres Henao
Associate Professor of Medicine
University of Colorado Anschutz Medical Campus
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WE BUILD
EXPERIENCE
WHO OUTBREAKS
2022.. SO FAR

Latest WHO Disease Outbreak News (DONs), providing information on confirmed acute public health events or potential events of concern.

Dengue
Bangladesh

As of 20 November 2022, a total of 52,807 laboratory-confirmed dengue cases and 230 related deaths have been reported.

Ebola
Uganda

A total of 141 confirmed cases and 55 confirmed deaths (CFR 39%) from Ebola disease caused by the Sudan Ebola virus (SUDV) have been reported.

MERS-CoV
SAUDI ARABIA

4 laboratory-confirmed cases of Middle East respiratory syndrome coronavirus (MERS-CoV) were reported to WHO.

Cholera
Malawi

Between 3 March through 31 October 2022, a cumulative total of 6056 cases including 183 deaths have been reported from 27 of 29 districts in Malawi.
MONKEYPOX

We are proud to be involved in the clinical care and innovative research with the ongoing mpox infection. We learned from colleagues through the city-wide monkeypox committee. Call for more research opportunities is open!

The clinical features of monkeypox in women and non-binary individuals were similar to those described in men, including the presence of anal and genital lesions with prominent mucosal involvement.

We present two separate cases of human monkeypox infection in men who have sex with men and concomitant HIV disease who both presented for anogenital lesions and proctitis who were successfully treated with tecovirimat.

People living with HIV had higher rates of clinical manifestations and required greater utilization of healthcare resources with monkeypox infection.
We are driven by creating quality that deliver results for our patients

**CHOLERA VACCINE**


**CRYPTOCOCCUS**


**AFRICAN TRYPANOSOMIASIS**

Another advance in the treatment of human African trypanosomiasis (HAT). Acoziborole led to treatment success rate of 95.2% at 18 months. As a single dose oral treatment; Acoziborole holds promise in the efforts to reach the WHO goal of interrupting HAT transmission by 2030. Great news!

**TOXOPLASMOSIS**

Wolfs infected with *Toxoplasma gondii* in Yellowstone National Park were 46 times more likely to become pack leaders and 11 times more likely to start a new pack than were uninfected animals.

**MALARIA**

Nosocomial malaria in a non-endemic country (France). Infections in 6 hospitalized patients without travel (over 15 yrs) were linked by genomics to patients concurrently admitted with imported malaria.

**MANSONELLA**

Cross-sectional assessment of peripheral blood samples in Panama identified microfilaria — *Mansonella ozzardi* — in 96 cases. Most of these cases were found in East Panama (78%) followed by the Darien region (22%).
As travellers gain confidence in travelling internationally again, we are position to grow and be committed to provide start of the art travel medicine care.
ALTITUDE MEDICINE AT UNIVERSITY OF COLORADO

We are driven by creating experiences that deliver results for our patients.

Altitude

Our altitude medicine group has been expanding into other travel areas.

NSF SUMMIT CAMP

Last year, we sent 3 UC Health doctors to Summit Station.

SUMMIT STATION IS A RESEARCH STATION, LOCATED AT 11,000 FEET OF ELEVATION, NEAR THE APEX OF THE GREENLAND ICE SHEET

<<We are back up and running with our altitude medicine clinic. The most common mountain we see travellers heading towards at this time is Kilimanjaro. We have been able to mentor our first series of students through a research project, looking at water purification methods at altitude. The clinic has also helped draft guidelines for pregnant people looking to engage in altitude and outdoor travel pursuits.>>

Dr. Elaine Reno attended the University of Cincinnati College of Medicine and completed her Emergency Medicine training at Denver Health Medical Center/University of Colorado. She completed her Wilderness Medicine Fellowship in 2016 at the University of Colorado School of Medicine. She is currently an Assistant Professor of Emergency Medicine at the University of Colorado School of Medicine.
We have had a very productive year. We have continued our clinical research team efforts and collaborations.
DOES COVID-19 AFFECT RISK AND OUTCOMES OF CRYPTOCOCCOSIS?

Patients with COVID-19 who developed cryptococcosis had independently higher rates of comorbidities and glucocorticoid use but similar outcomes, including death, versus those without COVID-19.

PRO-INFLAMMATORY CYTOKINE LEVELS IN SEPSIS

Sepsis mean TNF-α concentration is increased approximately 10-fold compared to mean concentration in healthy individuals, and TNFα associated with sepsis mortality but not sepsis severity. The concept that elevated cytokines cause sepsis should be revisited.

SEASONAL VARIATION IN GAS

Peaks in GAS pharyngitis occur in the winter months. ICD code–based necrotizing fasciitis did not show a quarterly seasonal variation. Work presented by Matt Kenis a medical student at IDWeek.

<< Novel theoretical approach may be the only means To solve the riddle of sepsis >>
Leland Shapiro, MD
WHAT RECOMMEND US

GLOBAL HEALTH
ACTIVE PARTICIPATION IN GLOBAL HEALTH EFFORTS

**TRYPANOSOMA CRUZI**

**Chronic Chagas Disease-the Potential Role of Reinfections**

Chagas cardiomyopathy and are linked to worse outcomes. Control efforts should be redirected to interventions that address structural poverty for the successful and sustainable prevention of Chagas disease.

**ARBOVIRUSES**

**Nervous System Manifestations of Arboviral Infections**

Led by Lakshmi, the review describe some of the most frequent and emerging neuro-invasive arboviral infections, and the spectrum of neurologic disorders including encephalomyelitis, Guillain-Barré syndrome, and ocular syndromes.

**HIV/AIDS**

**Clinical challenges of managing advanced AIDS in the tropics**

In patients with advanced AIDS, COVID-19 may coexist with other AIDS-related conditions, including respiratory and gastrointestinal opportunistic infections, especially in tropical countries such as Colombia.

**LEPROSY**

**Novel approaches in the treatment of Hansen’s disease**

Leprosy disease continues to be a underfunded NTD with huge global health impact. This report is positioned to change 1st line therapy in leprosy. Monthly rifampin, moxifloxacin, and minocycline showed to be effective and safe.

**POLIO VIRUS**

**The growing threat of wild poliovirus 1 in the COVID-19 era**

Decision makers should consider immunisation of travellers, people in war-torn areas, and migrants in transit from settings with endemic transmission or from locations with ongoing outbreaks of circulating vaccine-derived poliovirus (VDPV).

**YELLOW FEVER**

**A Perennial Threat**

The threat of YF will linger far into the 21st century as a leading public health emergency of global concern under the International Health Regulations.
Mario, Dan Olson, and Dave are co-PIs on a Roche Diagnostics funded project to evaluate antibody responses to SARS-CoV2 in a serosurvey of agricultural workers in southwest Guatemala (Trifinio).

Participants seropositive at baseline were less likely to experience a symptomatic SARS-CoV-2 infection during follow-up, NAb titers rapidly waned, underscoring the need for multipronged COVID-19 prevention strategies in the workplace, including vaccination.

Thomas Flaig visit to University of Zimbabwe: “Tom Campbell has been the driving force for the Colorado component of the educational/research programs for 20+ years”
2022 NUMBERS AND OUR GROWTH

General overview:
- Accept rate: 45%
- Average days from submission to first decision: 43 days
- 171 original submissions, 63 publications
- 147,656 Full text downloads (through end of October)
- Most read article in 2022: Burnham IP. Climate change and antibiotic resistance: a deadly combination.

This special collection welcomes contributions, which focus on but are not limited to the following areas:
- Encephalitis
- CNS Infection
- Neurological Complications of COVID-19
- Neurological Complications of HIV/AIDS
- Meningitis
- Transplant Related Infections
- Travel Related Infections
- Tropical Diseases
- Neurological infectious disease from a global health perspective