

## "Delicious autumn!"

My very soul is wedded to it, and if I were a bird I would fly about the earth seeking the successive autumns."

- George Eliot



Utrecht, the Netherlands

### Editorial

Dear EAN members,

We're pleased to present you with this year's autumn newsletter!

We hope you all had a great summer and are looking forward to snuggling up with candles and cake during the autumn ahead.

In this edition, we hear from EUPHEM alumnus Lola Fernandez and EPIET alumnus Grazia Caleo on their experiences fighting the Ebola outbreak in Sierra Leone, as well as EPIET Cohort 2013 fellow Tommi Karki on a mission closer to home - tackling MERS-CoV at WHO HQ in Geneva. Noel McCarthy (EPIET Cohort 3) tells us Where He Is Now, and we welcome all the new fellows embarking on their EPIET/EUPHEM adventure this year.

Autumn in the air means two things for the EAN: ESCAIDE and Elections. We're looking for enthusiastic volunteers to help run the EAN prizes at ESCAIDE this year, and of course, to be part of next year's EAN Board.

All are really important, really rewarding, and really fun roles, so do get keen and get in touch: as ever, your EAN needs you!

Happy snuggling,

Yours,  
The EAN Board

and  
Zuzana Klochanova & Suzan Trienekens  
Editor & Designer

### Board

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## WAYN? Noel McCarthy - Cohort 3

I have just taken up a post with the job title “epidemiologist” in the Public Health England Field Epidemiology Service. It has taken a while given that I completed EPIET in 1998, and even still is only part time. In parallel I am continuing to work part time on research projects at the University of Oxford.

The path between EPIET and here has included a lot of epidemiology despite different job titles whether as a public health trainee, as a Consultant in Communicable Disease Control, or researcher. A lot of what I have done has roots in things first tried with EPIET and developing and adapting novel approaches remains a strong interest, and a focus on quantitative methodology and synthesising different types of data. In EPIET time it was identifying why case-case comparison was particularly suited to the study of infectious disease epidemiology. More recently it has been more focused on applying bacterial population genetics to attributing human infections to their source and more generally on the integration of genomic data into public health epidemiology. This methodological focus has also driven a tendency to return to being a student intermittently including an MSc in statistics and a doctorate focussed on learning and applying

population genetics approaches, particularly in relation to *Campylobacter* infection.

Alongside the epidemiology one of the strongest impacts of my EPIET time has been a focus on training. Have had the good fortune of having Johan Giesecke as a supervisor, and getting the chance to try anything relatively sane in a supported environment, seems to have rubbed off a little and I have spent quite a lot of time teaching and training in epidemiology, public health and around immunisation over the years.

I think that I learned at least as much from the programme about training people to be expert as I did about epidemiology itself. I also carry Johan’s aphorism that “the first job of an epidemiologist is to keep their collaborators happy” which is hopefully not too mangled from his original wording. It seems almost impossible to pay too much attention to this aspect of epidemiological work.

Outside work I have been married, have two daughters and been settled in Oxford for 15 years which is quite a change after never being in the same country for more than 3 years in the 10 before that. Perhaps the future will be another foreign land but not just yet.





# Welcome to Cohort 2014!

A huge welcome to all who have joined the "EPIET family" this year as Cohort 2014. We wish you two years of unforgettable learning experiences, travels, adventures, parties and friendships – starting in Spetses!!

## *EPIET EU Track*

A Isidro Carrion Martin  
Silvia Funke  
Leonidas Georgalis  
Joana Madeira Vaz  
Hinta Meijerink  
Saara Parkkali  
Emilie Peron  
Alessandro Pini  
Jozica Skufca  
Georgios Theocharopoulos  
Salla Eliisa Toikkanen  
Cristina Valencia

## *EPIET MS Track*

Mario Fafangel  
Patricia Garvey  
Dorothee Lohr  
Madelief Mollers  
Flavia Riccardo  
Aymeric Bun Ung

## *EUPHEM MS Track*

Horacio Gil Gil  
Mohammed Umaer Naseer  
Susanne Schjørring  
Ákos Tóth  
Kyriaki Tryfinopoulou  
Alexandru Vladimirescu

## *EUPHEM EU Track*

Heli Simmonds Harvala  
Sabrina Nadine Weiss  
Francesca Latronico  
Natacha Korní da Fonseca Milhano

## *PAE*

Lena Bös  
Joana Haußig  
Eva-Maria Lutz  
Alexandra Hoffman  
Quedraogo Nobila Jean Marc

## *UK FETP*

Daniel Todkill  
Chantil Sinclair  
Suzan Trienekens  
John Mair-Jenkins  
Helen Crabbe  
Lynsey Patterson



*Introduction course  
2014, Spetses, Greece*



## Ebola, a blind outbreak - Grazia Caleo

First published 18/9/2014 on BMJ blogs <http://blogs.bmj.com/bmj/2014/09/18/grazia-caleo-ebola-a-blind-outbreak/#more-32349>

In Jose Saramago's book, *Blindness*, he describes the scenario of an epidemic of an unknown infection that causes blindness; a single person remains uninfected to bear witness to the anger, chaos, violence and death generated by the spread of disease.

In the novel, humanity's descent into blindness represents the loss of reason and shows how fear can cause dramatic social breakdown; at the same time the vision of one person represents the opportunity to restore light.

To some extent what I saw in the field as a medical epidemiologist reminded me of Saramago's book.

I saw "blindness" circulating in villages and amongst the Ebola 'experts'; I saw wisdom among the patients who survived and doctors and nurses that cared for them.

The underestimation of the risk and consequences of Ebola in an area bordering three countries; the fear caused by rumours; the late communication with the villages about Ebola and its spread; the huge numbers of patients dying in front of us without us being able to provide a treatment; the missed opportunity to trace contacts and to apply the simple rule of previous outbreaks "time, place, person" all contributed to a blind response.

As an epidemiologist I was in charge of setting up the surveillance system in the Médecins sans Frontiers treatment center in Kailahun, investigating where, how and when people became infected, visiting their homes to inform the village and trying to make sure that all the infected patients were isolated and that any new cases were rapidly detected.



Villages told us who had been the first case, how at the beginning people were helping each other and how, later on, infected people were moving to the borders or hiding in the forest for fear and to avoid stigma. For months those villages were left alone to fight Ebola, many of them experienced a huge number of uncounted deaths.

As a medical doctor I was supporting the medical team to treat patients and focus on the most vulnerable. As a doctor I felt helpless to face so many deaths and amazed to assist in patients' recoveries.

We knew each patient in the line list, their village, their family, how they became infected and for, most of them, the date of their deaths. We were able to reconstruct their relationships and calculate their risk according to exposure.

Each of them gave us a bit of light, helped us to think about how best to respond, where we should focus our efforts, and allowed us to understand the main driver of infection in those places. In the four weeks in the field we admitted 119 patients, with a case fatality of 79%, and 17 recovered.

The reality is that there is much that could be done based on data, human relationships and reason that Ebola seems to have contaminated and overshadowed.



MSF is looking for qualified epidemiologists and doctors to support the Ebola response. For more information, please see: <http://www.msf.org.uk/>



I was deployed to Kenema City in Sierra Leone in July 2014 via GOARN to provide operational support for the Ebola outbreak response activities. By that time Sierra Leone accounted for the greatest number of cases attributed to Ebola in the three affected countries. Moreover, the Kenema region where I was deployed was deemed to be the area of greatest concern requiring urgent improvement in the areas of data management, contact tracing and epidemiology. By the time I arrived in the Kenema Government Hospital (KGH) there was an Ebola treatment Centre (ETC) running in the former Lassa ward of the hospital and being taken care of by medical staff who were not implementing standard precautions effectively.

HCWs were operating in very precarious situations with poor practice of standard precautions and a lot of carelessness. Due to very unsafe environment too many national nurses have already been infected and died by the time I arrived there. Moreover, one day before my arrival, Dr. Khan, the head doctor in the hospital died from Ebola after treating dozens of patients. To avoid exposing more medical staff, both national and international, to risk and in order to improve the infection control and the dignity of patients, we worked together with MSF on the rehabilitation of the surgical



ward as a new ETC. I participated in the setting up of the new ETC by establishing for instance the flow of HCWs, patients and materials inside the ETC according to the recommendations in order to achieve a clear and easy circulation without cross-contamination. Other worrisome issue was the fact that phlebotomists working inside the high risk area of the ETC had poor practice of standard precautions and were not wearing the appropriate protective clothing. Many of the trainings I did aimed to reinforce the capacities of these workers regarding biosafety, safe specimen collection and transport. We also performed practical workshops on appropriate use of PPE, removal of PPE, modes of transmission of EV and standard precautions.



Regarding surveillance, I participated in the field supervision of Surveillance Response Teams in the verification and investigation of alerts. I witnessed the local resistance of these suspected Ebola patients to go to the hospital and the importance to sensitize community leaders not only to achieve that these patients seek treatment in the ETC but to encourage their communities for early consultation and to avoid the panic in the population. I also assisted these teams to line-list the contacts of each suspected case, suggested them questions to



better identify contacts, reminded them daily the case definition or helped them filling case investigation forms.

However, my main responsibility was to design and implement a triage system of suspected Ebola patients at the entrance of the hospital following the epidemiological case definition. After a thorough assessment of the intake process of patients in the KGH I found that no systematic triaging system existed. Patients that do not meet the epidemiological case definition for EVD were being referred to the EVD wards in high risk areas for testing and admission posing an unnecessary risk for these patients and a huge overload of work to our clinicians (we only had 2 clinicians in a ward full of Ebola patients, some days more than 80). Moreover, patients meeting the epidemiological case definition for EVD were being referred to the general wards posing a risk for healthcare workers in the hospital. In fact we came to have Ebola cases in different wards of the hospital (pediatric, maternity, TB ward...).

My main objective was to develop a triage system that included adherence to case definition in order to appropriately screen patients for Ebola and to prevent non-Ebola patients to be admitted into the suspected ward. For this aim we applied a case definition

sensitive enough to identify all potential cases in the community but less specific. I developed and implemented a strengthened 2 phase-triage: i) a first one at the main entrance of the hospital to ensure effective sensitive triage (based only on fever and clinical symptoms) while avoiding overcrowding the entrance and ii) a second triage placed at the entrance of the ETC where a detailed investigation (clinical and epidemiological) was performed.

I participated in the training of triage nurses on how to apply the case definition, how to fill our case investigation forms or the IPC measures needed to work in triaging. The main issue was that there may be patients that do not admit having a previous contact with an EVD patient for fear of being hospitalized. Therefore, during trainings we emphasized how these nurses should identify potential suspect Ebola cases based on exposures and symptoms and explained them how to engage patients, earn their trust and extract relevant clinical history. We also scaled-up trainings on case definition and triaging to HCWs working in different peripheral health units in the East of Sierra Leone. We discussed with them the best way to screen patients in their health facilities, many of which were in remote areas, and how to adapt the triage protocol that we developed for the KGH in their health facilities.



## Fellow on a mission - Lola Fernandez

Understaffing remained a major challenge during the whole mission. The national response to support response operations with staff has been very limited, not only for triage but especially in the field of case management, IPC and contact tracing/monitoring. During my stay only 2 WHO clinicians, very few nurses and no IPC were working in KGH which made difficult to effectively operate in these conditions. Level of volunteer nurses was very low. Moreover burial and disinfection teams were on strike.

Rioting around our hospital happened several times because of the panic of the population. Not enough with this, military troops and anti-riot police were deployed to Kenema to implement quarantine movement outside Kenema causing more anger in the population and less HCWs coming to work to the hospital. For instance, circulation of moto-taxi was banned which was a major obstacle from transport including nurses. Decision to quarantine contacts in their houses for 21 days with police/army posted around the houses did not help in contact tracing: some families in certain communities were not receiving any food or water for the past days leading to resistance from these communities and making contact tracing even more challenging (already very challenging as contacts abandoned their homes or gave wrong addresses and names during line listing). And I am writing these lines the same day Obama said he was going to send US troops to fight Ebola... Finally, other issue of great concern during my deployment was the stigmatization of workers, molestation and intimidation back in their communities. We found difficulty

working with local HCWs but also no HCWs (cleaners, laborers, support staff etc.) as there was a very strong stigma for anyone working inside the hospital resulting in their absence from work and therefore in delays in the implementation of response activities.

In spite of the difficult context of the mission, the political and operational issues faced, and the stress, I have to say that working in the response to this unprecedented outbreak provided me with a unique and genuine opportunity to learn how to operate/coordinate activities during emergencies of international concern. I cannot finish without highlighting the exceptional efforts and hard work done by my WHO colleagues and humanitarian partners (MSF, IFRC, IRC) in Kenema. Finally I want to express my deepest condolences to the phlebotomists, nurses, doctors or members of the Surveillance Response Teams, to those that I met, trained or worked with in Kenema and to those I never met, that contracted Ebola in the course of their work and lost their battle with the disease: my most sincere condolences. And to those currently battling Ebola (like the head nurse in the KGH, Nancy, in the photo dressed with blue scrubs): my strongest support and encouragement.



In the spring 2014 an upsurge in MERS-coronavirus cases was seen in the Middle-East, eventually leading also to a mission for epidemiological support for the joint MERS/H7N7-task force at WHO. I was initially interested in the task because of my background in healthcare-associated infections, as MERS had caused outbreaks in healthcare settings, but also because I wanted to have experience also of emerging diseases – something MERS-coronavirus certainly was this spring if not before (just look at the epidemic curves if you won't take my word for it).

Thus, two weeks after applying I got the message of being selected for the mission, in the middle of my morning cappuccino. So, a few days later in the middle of May, I started my mission at the WHO headquarters in Geneva, being the second EPIET fellow placed to work on MERS in the headquarters; an earlier fellow had been there in 2013. The mission was planned to last six weeks, which it did, six weeks passing quickly.

where I chose to stay for the time in Geneva, a concrete-bunker in the basement of a family from Sri Lanka, a bunker where I had a lovely view to a concrete wall one metre from the "window". But this bunker came with a benefit, as I got to return to my familiar state of having the possibility to walk (or to stroll) to work every day, a possibility that I had been missing a little since leaving Helsinki for EPIET.

During the mission, as I had thought beforehand, I mainly worked on the surveillance and descriptive epidemiology of new MERS cases reported by the affected countries. Participating in the MERS/H7N7-task force, I got the opportunity to see the developments of the outbreak, and to work with a multinational, multidiscipline team of experts.

This experience was certainly positive, as well as working with a team of experts on the subject matter, the reception to the team was also extremely welcoming.



Geneva, and especially the WHO headquarters, albeit being far from the "field", gave a nice contrast to my usual EPIET-life in a national institute for public health, because of the very, very international atmosphere. Similar "international" applied also to the place

Although my stay was relatively brief, too brief in many ways as there's always more work to be done, I did have a feeling of my work being appreciated, which of course is always rewarding, especially when one ends up in a new setting in a new country.



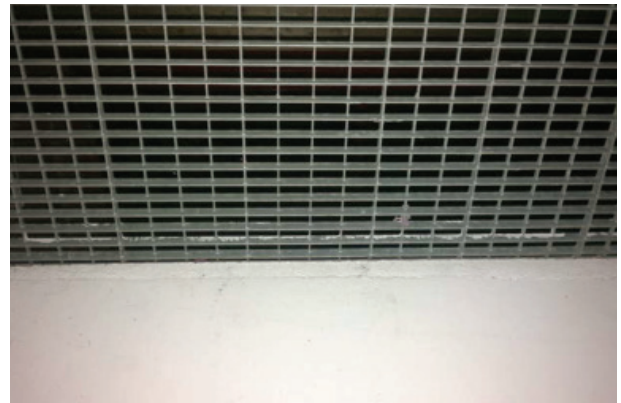


## Fellow on a mission - Tommi Kärki, MERS

On the mission I also gained valuable experience of the work of GOARN and WHO. In advance I mainly knew what the abbreviations stood for, but during my stay I got to understand the truly global nature of their work, which was highlighted not only in relation to MERS but also to other outbreaks happening at the time.

And of course, for any future work in public health a bit closer grasp to abbreviations such as IHR can be very valuable, as well as having had the opportunity to present the epidemiological situation of MERS in a GOARN-meeting, and getting to see some of their international activities much closer than usually.

All in all, my experience of the mission was very positive, and I feel that I managed to be useful whilst working there, keeping up with the numbers among other things.



*The view from my private bunker, with a little bit of imagination you can almost see the starry sky. But it was close to work.*

I met great, experienced people, had long days at work, and was very happy with it. So, I'd certainly go on a mission again, as wherever one is placed there's always something to learn and something to see, especially when the setting and the situation nevertheless is different from the usual.

*EPIET-fellow officially, and briefly, presenting at a meeting*





## *Your EAN Needs You!*

ESCAIDE 2014 is just around the corner, and as every year we are looking for enthusiastic volunteers to help with running the EAN competitions for Best Poster, Best Oral Presentation, and Best Photo.

All are great opportunities to engage with the network, and a lot of fun too! Please email us at [eanboard@gmail.com](mailto:eanboard@gmail.com) if you'd like to get involved.

## *ESCAIDE travel grant donations* Thank you, Cohort 10!!

Every year, the EAN administers a small number of competitive travel grants to allow epidemiologists and public health microbiologists from across the world to attend ESCAIDE. These grants allow our colleagues from low and middle income countries, who might otherwise be unable to attend ESCAIDE, to participate in the conference and make a valuable international contribution.

Last year, for example, EAN funded three colleagues Ramesh Allam from India, Saindou Bel Ali Mbae from Comoros, and Cirit Osman

from Turkey - to give oral presentations on *Survival probability and predictors of mortality among patients enrolled for first-line antiretroviral therapy (ART), Andhra Pradesh, India, 2008-2011; Food-poisoning outbreak and fatality following ingestion of sea-turtle meat in the rural community of Ndrondroni, Mohéli Island, Comoros, December 2013*, and a poster on *Microorganisms isolated from blood samples and their antimicrobial susceptibilities*, respectively.

As a rule, it has always proved very difficult to find external sponsorship for these grants, and the continuance of this scheme has rested largely on funds from membership fees and member donations. So we are very grateful to Cohort 10, whose members have recently pledged to donate a total of 200€ to this worthy cause!! Thank you, Cohort 10!

If you would like to follow in their footsteps and make a Travel Grant Donation, please do so using the bank details below, and clearly reference the payment as "Travel Grant Donation" so our treasurers are aware what the funds are intended for. Many thanks in advance for your generosity.



Thank you to Martin Mengel (Cohort 14) for sharing this link to EPIPOI, epidemiological time-series analysis freeware! <http://www.epipoi.info/>

## *About EPIPOI (in their own words):*

Common analytical tools often lack methods relevant to time-series, forcing users to either defer to more experienced users or be confronted with the steep learning curve of coding their own functions. We believe that such complexity is meant for programmers and not users, who should be principally concerned with extracting and interpreting the maximal information from their data. EPIPOI makes such

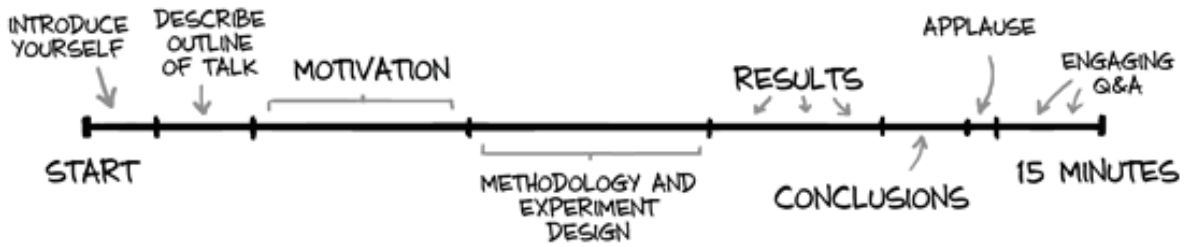


techniques available without requiring special mathematical knowledge.

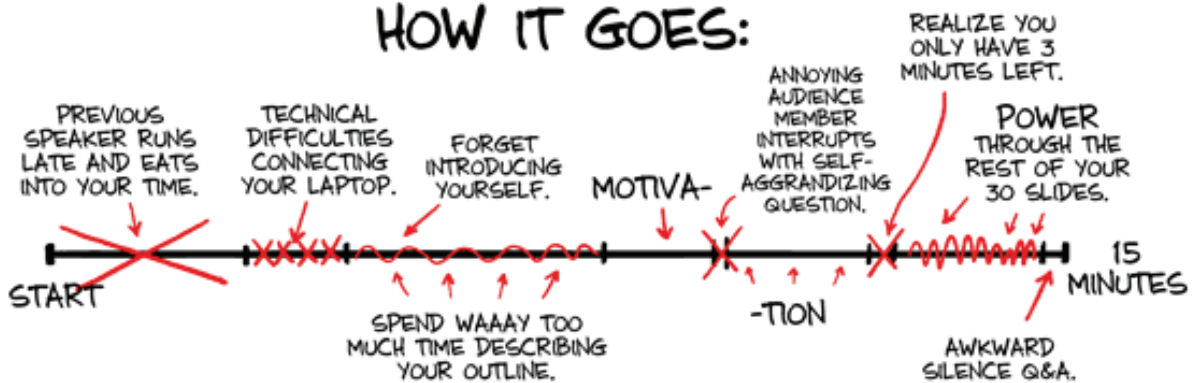
EPIPOI offers users the opportunity to extract seasonal parameters from time-series, examine trends and identify unusual periods (for example epidemic peaks). Users are encouraged to visualize these parameters in the context of geographic variation to identify possible relationships in both space and time.

# YOUR CONFERENCE PRESENTATION

## HOW YOU PLANNED IT:



## HOW IT GOES:



Copyright: PhD comics



## EAN Membership fees

Membership of the EAN is 20€ or £18 per year, and can be paid in either currency to the following bank accounts. A 200€/£180 life membership fee is also available.

### *Payment in Euros (20€)*

Name of Bank: HSBC UK  
Bank address: HSBC UK, 18 London Street,  
Norwich, NR2 1LG, UK  
Account Holder: Epiet Alumni Network  
Account number: 71822755  
Sort code: 40-05-15  
IBAN: GB11MIDL40051571822755  
BIC/Swift: MIDLGB22

### *Payment in Pounds (£18)*

Name of Bank: HSBC UK  
Bank address: HSBC UK, 18 London Street,  
Norwich, NR2 1LG, UK  
Account Holder: Epiet Alumni Network  
Sort code 40-35-09  
Account number 43922782

Please indicate your name and year(s) for which you are paying in the transfer reference, and send an email to [eanboard@gmail.com](mailto:eanboard@gmail.com) with details of the year(s) for which you are paying and if possible a snapshot of the transfer. That way we can confirm receipt of the funds and update our records.

If you have any doubts with regard to your current payment status, please send us an email to [eanboard@gmail.com](mailto:eanboard@gmail.com) and we will look back in our records and let you know.

Please note that if you do not pay your annual membership fee you will become an "inactive" member; as such you will lose the right to vote and will no longer receive EAN services such as our weekly jobs bulletins, quarterly newsletters, workshops and mini-modules.

Many thanks!



## Board elections: Your chance to shape the network!

This November, the following posts on the EAN board are up for election: Vice-president, Treasurer, Secretary (x2)

Board members serve for a term of two years, and elections will take place at the time of EAN General Assembly during ESCAIDE in November 2014. Service on the board is an excellent opportunity to develop close links with the network membership, and to make a personal contribution to the strategic direction of the EAN. Watch your inbox for more details on how to put forward your candidacy for election!

### *Role of vice-president*

The Vice-President replaces the President in his/her duties in case the latter is unavailable; in addition the president has specific duties related to the EAN membership base. Responsibilities include:

- Attends all the responsibilities of the president in case the president is unable to attend them.
- Provides strategic vision for alumni relations through collaborative leadership between the EAN board and the EAN membership base.

- Provides overall coordination of the specific subcommittees or working groups created internally in the EAN
- Deals with any other task that may be decided in consultation with the other members of the Advisory Board (See "Ad-Hoc Tasks")

### *Role of treasurer*

The Treasurer and his/her deputy are responsible for maintaining the accounts of the EAN. Responsibilities include:

- Looking after the EAN budget
- Administering membership fee payments
- Updating membership database
- Administering EAN travel grants

### *Role of secretary*

The Secretaries provide operational support to all the activities of the EAN board. Responsibilities include:

- Developing the weekly Jobs and Courses bulletin
- Developing the quarterly Newsletter
- Arranging EAN meetings and taking minutes
- Managing the EAN inbox