

STEEVE EBENER, PH.D.

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FREELANCE CONSULTANT

Project Management / Technical Support / Results delivery

Objective:

Support countries in their discovery as well as efficient management and use of geospatial data and technologies to improve peoples' quality of life while respecting the environment.

Career summary:

20 years of experience in working for and then with the United Nations, the World Health Organization (WHO) in particular, to provide technical support to countries when it comes to:

- Integrating the geographic and time dimensions in their information systems;
- Using the resulting standardized and documented geographic data in advanced spatial analysis;
- Connecting the health sector to the National Spatial Data Infrastructure (NSDI).

Strong background in the design, implementation and monitoring of small and large scale projects/systems as well as in the provision of strategic and technical support relating to the management and use of geospatial data and technologies.

Job Skills:

- An experienced team leader with the ability to initiate/manage large multi-disciplinary teams and projects and to deliver cost-effective solutions;
- Systemic and analytical thinking, decision making and problem solving skills with a strong experience in the areas of geospatial technologies and data;
- Excellent personal communication skills;
- Project management skills including influencing, leading, negotiating and delegating abilities;
- Adaptable, agile, and tolerant in stressful environments.

Other Skills:

- Good Teacher
- Effective listener
- Network builder
- Creative thinker
- Strong organizational aptitude
- Determination and diplomacy

PROFESSIONAL EXPERIENCE

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DEC 2014 - PRESENT

Coordination, strategic and technical supervision as well as implementation of projects pertaining to the management and use of geospatial data and technologies in countries. Strengthening of the technical capacity of Ministries of Health when it comes to the integration and use of geography and time in their health information system (HIS geo-enabling). Development and implementation of advanced GIS methods to assess population and health services vulnerability, capacity and risk as well measure physical accessibility to health care. Development of a new collaborative and cross-cutting framework aiming at improving the availability, quality and accessibility of the core layers used for emergency management and disaster risk reduction.

Current Projects

- Managing the Health GeoLab Collaborative (HGLC) to support the health sector in Asia and the Pacific when it comes to the geo-enablement of the in country Health Information System (HIS).
- Supporting the use of geospatial data and technologies to improve routine immunization coverage in Myanmar.
- Assessing the availability, quality, accessibility and use by the health sector of key geospatial and statistical data in Myanmar as part of the Geo-Referenced, Infrastructure and Demographic Data for Development project (GRID³)
- Supporting the development of a Common Geo-Registry (CGR) under the umbrella of the Digital Solutions for Malaria Elimination initiative (DSME)

Selected Achievements

- Established the AeHIN GIS Lab and then the Health GeoLab Collaborative as well as the different resources they have been providing to countries with the support of ADB and WHO
- Developed the HIS geo-enabling framework and lead its implementation in Cambodia, Myanmar and Vietnam as well as its presentation in different other countries such as Indonesia;
- Originated the concept of common geo-registry for the simultaneous hosting, management, regular updating and sharing of the master lists for the geographic objects core to public health
- Co-organized the DHIS 2 as common geo-registry workshop in Oslo in April 2018, workshop attended by country representatives from Cambodia and Indonesia
- Contributed to the development of the guidance on the use of geospatial data and technologies in immunization programs
- Supported the development of version 5.0 of AccessMod and its use to analyze physical accessibility to essential health services in Malawi and three States in Nigeria and in the Philippines.
- Supported the development of the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) strategic framework on geospatial information and services for disasters
- Supervised and implemented the Strengthening Information Infrastructure for Emergency Management (SIEM) project in both Morocco and the Philippines;
- Implemented the VRAM process and strengthening of the risk assessment capacity of the Supreme Council of Health (SCH) of Qatar and of the Ministry of Health and Medical Education (MOHME) of Iran;

**GAIA GEOSYSTEMS
CEO****2011 - 2014**

Strengthened the data management and GIS capacity of Ministries of Health and other health partners in several countries starting from the integration and use of geography and GIS in their health information system to the implementation of advanced GIS methods to assess population and health services vulnerability, capacity and risk as well measure physical accessibility to health care.

Selected Achievements

- Supervised the development of version 4.0 of AccessMod, a free extension to ArcGIS 9.3.1 that allows measuring physical accessibility to health care services;
- Produced the maps for the joint WHO/WMO Atlas of health and climate;
- Developed the GIS guidelines for the Department of Health of the Philippines (DOH).
- Supervised and implemented the geographic accessibility to the Emergency Obstetric Care (EmOC) services analysis as well as transferring the technical knowledge behind the approach in 4 countries (Burkina Faso, Cambodia, Laos and Malawi);
- Provided technical support to the Department of Health (DOH) of the Philippines regarding the integration of the geographic and time dimensions in the Health Information System (HIS), the establishment of the National Health Facility Registry (NHFR) and the strengthening of the GIS capacity for the planning, implementation and monitoring of different health related project;

**WORLD HEALTH ORGANIZATION (WHO) - MEDITERRANEAN
CENTER FOR HEALTH RISK REDUCTION (WMC), TUNIS, TUNISIA
Chief of the Vulnerability and Risk Analysis & Mapping program (VRAM)****2009 – 2011**

Led, coordinated, and provided first-level supervision to the VRAM team. Provided technical support to Member States by leveraging and strengthening their own capacity to visualize and analyze health risks using geography and Geographic Information Systems (GIS). Established a partnership and network of expertise to support Member States. Contributed to the development of innovative methods for the analysis and mapping of health vulnerabilities and risks.

Selected Achievements

- Coordinated the development of the new version of the WHO e-atlas of disaster risk for 3 of the WHO regions (AFRO, EURO and EMRO);
- Supervised the implementation of the VRAM process in: Kazakhstan, Kosovo, Mexico, Pakistan, Oman, Sudan and Tunisia;
- Established the WHO Risk Assessment Working Group (RAWG).

**WORLD HEALTH ORGANIZATION (WHO), GENEVA,
SWITZERLAND
Project Manager****1999 – 2009**

Planned, organized and managed resources including staff. Initiated, designed, executed, and monitored projects using geography and Geographic Information System (GIS) to collect, manage, integrate, analyze and model the geographic and temporal dimension of public health data. Developed new standards, protocols and methods that combine GIS, statistics and social networking to map and analyze health system performance, health inequities and health risks.

Selected Achievements

- Launched and managed for 10 years the United Nations Second Administrative Level Boundaries data set project (SALB) which covered more than 140 countries including Indonesia;
- Initiated the Physical Accessibility to Health care Modeling project including the development of the AccessMod extension under ArcView 3.x;
- Coordinated the development of the first version of the WHO e-atlas of disaster risk for the Eastern Mediterranean Region;
- Developed the training material and supervised the data collection and cleaning of the geographic component of the WHO World Health Survey (WHS) and WHO SAGE survey using GPS devices;
- Developed training materials on Social Network Analysis (SNA).

**UNIVERSITY OF GENEVA, DEPARTMENT OF EARTH
SCIENCES, SWITZERLAND**
Research Assistant

1994 – 1999

Supervised students in the context of their master theses. Provided technical assistance for the maintenance of the computer laboratory.

EDUCATION / CERTIFICATION

- Introduction to Epidemiology and Statistics, MORU, Bangkok (2016)
- Introduction course to methods for spatio-temporal analysis of exposure and health data, Geneva (2006)
- Ph.D. Thesis in earth sciences, University of Geneva (1999)
- GIS course, geostatistical cartography, neuronal network, GIS, University of Lausanne (1998)
- GIS course, introduction to geographic data set management systems, University of Neuchâtel (1997)
- GIS course, GIS application in Geology, University of Geneva (1996)
- Diploma in earth sciences, University of Geneva (1994)
- License in earth sciences, University of Geneva (1991)
- Bachelor of Science (with recommendation), Collège Voltaire (1988)

LANGUAGES

- French – native language
- English – speak fluently and read/write with high proficiency
- German – speak, read, and write with basic competence

PUBLICATIONS (PEER REVIEWED)

- Ebener S., Stenberg K., Brun M., *et al.* (2019): Proposing standardised geographical indicators of physical access to emergency obstetric and newborn care in low-income and middle-income countries. *BMJ Global Health* June 2019, Volume 4, Suppl 5
- Ebener S., Guerra-Arias M., Campbell J., Tatem A.J., Moran A.C., Amoako Johnson F., Fogstad H, Stenberg K., Neal S., Bailey P., Porter R, Matthews Z. (2015): The geography of maternal and newborn health: the state of the art. *International Journal of Health Geographics* 2015, 14:19
- Speybroeck N., Paraje G., Prasad A., Goovaerts P., Ebener S., Evans D.B. (2012): Inequality in Human Resources for Health: Measurement Issues. *Geographical Analysis* 2012, 44, 151–161.
- Adam T., Ebener S., Johns B, Evans D. (2008): " Capacity utilization and the cost of primary care visits: Implications for the costs of scaling up health interventions", *Cost Effectiveness and Resource Allocation Journal* 2008, 6:22.
- Ray N., Ebener S. (2008): " AccessMod 3.0: computing geographic accessibility to health care and geographic coverage using anisotropic movement of patients", *International Journal of Health Geographics* 2008, 7:63.
- El Morjani Z., Ebener S., Boos J., Abdel Ghaffar E., Musani A. (2007): "Reducing the health impact of some disasters: modelling the spatial distribution of 5 natural hazards in the context of the WHO/EMRO Atlas of Disaster Risk". *International Journal of Health Geographics* 2007, 6:8
- Elvidge C.D., Cinzano P., Pettit D.R., Aversen J., Sutton P., Small C., Nemani R., Longpre T., Rich C., Safran J., Weeks J., Ebener S. (2007): "The Nightsat mission concept", *International Journal of Remote Sensing*, Volume 28, Issue 12 January 2007 , pages 2645 - 2670.
- Ebener S., Khan A., Shademani R., Compernelle L., Beltran M., Lansang M.A., Lippman M. (2006): "Knowledge mapping as a technique to support knowledge translation". *Bulletin of the World Health Organization*, August 2006, 84 (8): 636-642.
- Ebener S., Murray C., Tandon A., Elvidge C. (2005): "From wealth to health: modelling the distribution of income per capita at the sub-national level using night-time light imagery", *International Journal of Health Geographics*, 4:5
- Ebener s., Wildi W., Bouzelboudjen M., Jaquet J.M., Fortin J.-P. (2001): Contribution of a GIS in the spatial modeling of the hydrologic balance of Allondon watershed (France, Switzerland). 3rd International Conference on Future Groundwater Resources At Risk, 25-27 June 2001 - Lisbon, Portugal
- Ebener S. Bouzelboudjen M., Wildi W. (1998): "Eléments hydrogéologiques dans l'étude de l'influence de deux décharges sur le système aquifère de la plaine du Rhône (Valais central, Suisse)". *Archs. Sci. Genève*, Vol. 51, Fasc. 2, 153-170

PUBLICATIONS (NOT PEER REVIEWED)

- Ebener S., Roth S., Khetrupal S. Building Capacity for Geo-Enabling Health Information Systems: Supporting Equitable Health Services and Well-Being for All ADB brief No. 88, February 2018.
- Roth S., Landry M., Ebener S., Marcelo A., Kijsanayotin B., Parry J. (2016): The Geography of Universal Health Coverage: Why geographic information systems are needed to ensure equitable access to quality health care. ADB brief No. 55, April 2016.
- Tan C.L., Aguirre M.V., Aracap A.S., Gepte A.T., Nievera L., Ebener S. (2014): Building medical expertise network - The case of the Social Network Analysis of the Doctor to the Barrios (DTTB) Program. DOH Library Cataloguing--in--Publication Data. ISBN: 978-621-95128-0-0.
- Ramsey J.M., Castillo J.F.P., El Morjani Z., Ebener S., Colombo Llimona R. (2013): E-Atlas para los riesgos de desastres, aplicación a México: Metodologías y procesos de implementación. Primera edición, Publicado por Códice Roseta, S.A. de C.V. Oeste 12, San Luis Tlatilco Naucalpan de Juárez -53630. Estado de México. ISBN: 978-607-00-6824-9.
- Ebener S., Ray N., Black M., El Morjani Z. (2005): "Physical Accessibility to health care: from isotropy to anisotropy". GIS@Development, Vol 9, Issue 6, June 2005.

AWARDS AND RECOMMENDATIONS

- Esri GIS Hero (<http://www.esri.com/news/arcnews/fall07/articles/who-manager.html>)
- Recommendation letter from the Secretary of Health, Republic of the Philippines
- Certificate and medal of appreciation from the Minister of Emergency Situations, Kazakhstan
- Other recommendations on my LinkedIn profile (<https://www.linkedin.com/in/steeveebener>)

REFERENCES

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