

Significant anniversary of Michal Giboda, Doctor of Natural Sciences (RNDr) and Ph.D., Associate Professor

Michal Giboda, Doctor of Natural Sciences (RNDr) and CSc was born on 16.11.1938 in Štefanovce, Vranov nad Topľou County, then Czechoslovakia - now the Slovak Republic. After graduation from the Faculty of Education in Bratislava, he worked for the Department of Physical Education at the University of Agriculture in Nitra. Later he moved to the Regional Public Health Authority in Košice, where he started his career in the field of parasitology completing his academic studies at the Faculty of Natural Sciences in Bratislava (1968) acquiring the academic doctoral degree in parasitology (RNDr) in 1971. He first worked as chief of the parasitological laboratory, later as chairman of the department and was appointed Chief, Reference Laboratory for Intestinal Parasitic Diseases in Slovakia in 1978. While working for the Regional Public Health Authority, Giboda completed his PhD (CSc.) thesis in 1979. Soon afterwards, the Deutsche Akademische Austauschdienst (DAAD) awarded Doc. Giboda a grant to follow a tropical medicine course with subsequent research in protozoology in Hamburg, Germany, organised by the Institute of Tropical Medicine there. However, the Slovak Ministry of Health rejected his participation stating that DAAD used this kind of appointments as a way of recruiting agents against socialist regimes. Instead, he remained in Košice where he, in addition to his scientific endeavours, spent six years as part-time External Broadcasting for the Slovak Television in Košice and also wrote short scripts. Together with a colleague from the Department of Dermatology, University Hospital of Košice, he won a nationwide competition with a film called "Bitter loves" (Trpké lásky).

Invited by the director of the Institute of Parasitology (CAS) in České Budějovice to organize the department oriented on tropical parasites, he left Košice 1981. Collaborating with the regional hospital regarding clinical check-up of severe imported parasitic diseases, he established a tropical parasitology department at CAS. By appointment of the Czech Ministry of Health, this department performed preventive parasitological surveys of all foreigners crossing the border into the Czech Republic from 1982 to 1989. During that period 5 511 people from 87 countries were examined, which led to tropical parasitology becoming his principal interest. Doc. Giboda was the first in Czechoslovakia to diagnose the coccidia *Isospora belli* and *Isospora hominis* as well as *Fasciola hepatica*, *Dientamoeba fragilis* and *Trichostrongylus sp.* in Slovakia. He also isolated *Leishmania tropica* from skin lesions of a Slovak person working in Iraq and published the largest aggregate in the Czechoslovak literature of *Strongyloides stercoralis* infections (17 cases) discovered in eastern Slovakia. The latter discovery was remarkable as none of the infected people displayed any symptoms associated with the digestive system; instead the symptomatology was linked to the capture of circulating immune complexes in skin, brain and kidneys.

Due to his work in the area of parasitic disease, Doc. Giboda came to visit various foreign countries. Three years after the overthrow of Pol Pot and his regime of terror, from 1983 to 1984, He worked on leave of absence from CAS as laboratory chief in Takeo Hospital, Cambodia. His experiences during that period are described in his book entitled *Treat and survive in a Cambodian hospital after Pol Pot* (Léčit a přežít v kambodžské nemocnici po Pol Potovi) reflecting struggle but also the pleasure of being able to make a difference in a hospital striving to function in a devastated country. In 1985, Doc. Giboda was invited by the Ministry of Health of Cambodia to join the staff at the Malaria Center in Phnom Penh studying the resistance development of antimalarial drugs with special reference to *Plasmodium falciparum*. He organised an *International Microsymposium on Imported Human*

Tropical Parasitic diseases in České Budějovice in 1986 and the following year he relocated to the Institute of Tropical Medicine Pedro Couri in Havana, Cuba to work on the impact of antigen diversity of *P. falciparum* on the antibody response in people in various geographic regions.

Since there were no reported data on the scale of human parasite infections in South Yemen and Laos, two socialist countries in close contact with Czechoslovakia at the time, Doc. Giboda was asked to organize a team in 1989 researching the prevalence of human parasites there. The team's efforts brought new primary data on human parasitic diseases in the given regions. Its research on small trematodes transmitted to humans by the consumption of raw fish is of special interest as it eventually led to the creation of the group of diseases we now call the food-borne trematodes (FBT), which has become part of the *Neglected Tropical Diseases (NTD)*, which today is the focus of renewed research efforts recommended by the World Health Organization (WHO).

The research in Laos was of great interest also at the diplomatic level. The Czechoslovak ambassador to Laos informed the Ministry of Foreign Affairs at home that Dr. Giboda's team was highly appreciated locally and the WHO representative in Laos recommended further cooperation between Laos and Czechoslovakia in a letter to the WHO Regional Office of the Western Pacific (WPRO) in Manila. This led to a request in 1991 from Dr. J.R. Baker, editor of *Transactions of the Royal Society of Tropical Medicine and Hygiene*, asking Dr. Giboda to write two leading articles: one concerning the research achievements with respect to tropical medicine and parasitology in Czechoslovakia; and one summarizing such research and data in the sphere of countries having declared themselves as socialist. The basic reason for Baker's request was the absence of information about such research in the West.

Between 1992-1993 Doc. Giboda worked in the Institute of Parasitology of McGill University in Montreal, where the Medical Research Council of Canada awarded him a grant to find a way to prevent the fibrotic, perioval granuloma due to *Schistosoma mansoni* infection. Between 1993 and 1999 he was head of the Department of Microbiology at San Juan Bautista Medical School in Caguas, Puerto Rico. There he extended his collaboration with McGill University on the schistosomiasis research based on a grant by the WHO/TDR in Geneva. Starting the work by mapping the actual prevalence of *S. mansoni* in Puerto Rico, he came to the astonishing conclusion that an area where in the past the prevalence of *S. mansoni* was around 40 %, only three adults out of 495 examined, were currently infected. Surveying the presence of *Biomphalaria glabrata*, the snail intermediate host of *S. mansoni*, Doc. Giboda showed that the explanation was that this snail species had been completely displaced by the introduction of *Thiarea granifera*, another snail that cannot transmit the parasite. This finding inspired him to organise a workshop for invited scientists entitled *International Workshop on Schistosomiasis in the Post-Transmission Phase* held in San Juan, Puerto Rico in 1998. Lectures by WHO specialists from Belgium, Brazil, Egypt, Germany, Norway, Morocco, The Netherlands, Puerto Rico and USA were published in a special edition of journal *Acta Tropica*. This meeting marked to start of using the term *post-transmission schistosomiasis*, which emphasizes that schistosomiasis is a chronic disease and that the symptoms remain in an endemic population long after transmission has been stopped.

Between 1965 and 2018 Doc. Giboda published 89 scientific papers mostly in international scientific journals registered in PubMed, an archive of peer-reviewed, scientific literature at the National Institutes of Health's National Library of Medicine, USA. Doc. Giboda has published an additional 7 scientific articles in other journals with impact index.

According to the Web of Science Doc. Giboda's H-index is 11 and his articles have so far been cited 365 times. The title of one of his oldest publications is *Single cells parasites of human intestine*. Since then he has published and been cited in books such as: *Manson's Tropical Diseases*, IARC Monographs on the evaluation of Carcinogenic Risk to Humans, Vol. 61, Schistosomes, Liver Flukes and *Helicobacter pylori*. For students at the San Juan Batista School of Medicine in Puerto Rico he wrote the textbook *Basic Medical Parasitology* emphasising the clinical need of differential diagnosis, evaluation of therapeutic effect, pathological fundamentals of parasite infection diseases etc. He has received grants from several donor agencies, i.e. a Czech grants agency (1), WHO/TDR (4) and the Medical Research Council of Canada (1).

Michal Giboda is not only an exceptional researcher, but also known in arts. He is a member of the Czech Journalists' Syndicate (Syndikát novinářů ČR) and has published articles and essays concerning science, education and arts. He is chairman of the NGO *Dialogue of Science and Arts* (Dialog vědy s uměním) and his book "Mosty a propasti mezi vědou a uměním" (Bridges and gaps between science and art) is dedicated to this topic. He has also led series of public debates with significant people from public, cultural and scientific environment. Ten of the chosen debates are included in the book *Interviews with people who have something to say* (K věci, rozhovory s lidmi, kteří mají co říci).

In 2004, the Ministry of Culture of the Czech Republic proposed the appointment of Doc Giboda as National correspondent in *Netd@ys* Europe, the European Commission for Education and Culture programme. For his scientific results he has been honoured four times at home and three times abroad (In 1984 - the Cambodian Ministry of Health, in 1997 - the Puerto Rico Chamber of Deputies, and also in 1997 - the Puerto-Rico – GlaxoWellcome Research Award for the publication of *Dichotomous Effect of Steroid in Murine Schistosomiasis mansoni is changed by Antifibrotic Treatment*. Doc. Giboda was included in the project "Memory of Nations" (Paměť národa) in 2014 (Post Bellum: Příběhy 20. Století – Post Bellum: Stories of the 20th century) and, in 2016 he received the honorary citizenship of his native village Štefanovce.

Dear Michal, on occasion of this significant jubilee of yours I would like to thank you for your substantial contribution to parasitology. I wish you good health, optimism, enthusiasm and success in your various unceasing activities as well as happiness in private life as well as in work.

Ad multos annos,

Prof. RNDr. František Ondriska, Ph.D.