

Alena R:

Title: Intercultural communication: Activities of Non-Governmental Organizations working with immigrants.

Abstract:

This article presents non-governmental organizations as a common part of our society and culture and as a kind of intercultural communication. It states that this is the way we interact with immigrants. The main activities of Non-governmental organizations to help these people with adaptation to our cultural environment include law and social services, a number of courses, multicultural activities and other services. This work analyses these activities in order to understand the process of cultural interferences.

Sona:

RITUXIMAB SENSITIZES SOME B-CLL SAMPLES TO FLUDARABINE AND CHLORAMBUCIL IN VITRO, REGARDLESS OF P53/ATM STATUS

Background: Aberrations of two co-operating genes, the p53 and ATM, significantly deteriorate prognosis and treatment options for B-CLL patients. Monoclonal antibody rituximab (anti-CD20) is preferably used in combination regimens in B-CLL, often in those containing fludarabine. Very few in vitro data exist, however, showing an effect of such common treatment on B-CLL cells with aberrant p53 and/or ATM. In this respect, the data are also missing for a potential application of rituximab with chlorambucil.

Aims: The aims were to assess the in vitro effect of the above mentioned combinations of drugs on B-CLL cells with various p53/ATM status.

Methods: An interphase FISH was used for a determination of p53 and ATM deletions. Functional FASAY analysis coupled to sequencing was employed to supplement the screening also for p53 mutations. A metabolic WST-1 assay monitored the drugs effect on cell viability. An in vitro system lacking active human plasma was used, thus omitting the CDC pathway. After rituximab pre-treatment (10µg/ml, 72h) the chemotherapeutics were applied in four concentrations for additional 48h (F: 25 - 0.4 µg/ml; CLB: 50 - 6.25 µM). Two-way analysis of variance (ANOVA) was used for determination of rituximab pre-treatment significance.

Results: For the rituximab/fludarabine combination we tested forty samples having a median 85% of B-CLL lymphocytes, with the following characteristics: 13 were wild-type, 10 harbored ATM deletion (median 83% of deleted cells) and 17 exhibited p53 defects of various complexity - both alleles inactivation (del/mut and mut/mut) as well as the separate (one allele) aberrations (del or mut). The sensitivity to fludarabine was determined for the concentration 1.6µg/ml, which provided significant differences among the samples. The sensitivity was assessed as follows: resistant - viability \geq 60%; medium - viability < 60% and \geq 40%; sensitive - viability < 40%. The p53-affected samples were mostly resistant (71%) and none were sensitive. Among ATM deleted samples, on the contrary, 40% were sensitive, what was more than in wild-type subgroup (23%). Rituximab alone slightly increased a metabolic activity in most of samples, usually to 110-130% compared to untreated controls, while rarely a decrease was also noted (up to 80%). When the viability of fludarabine-treated and rituximab/fludarabine-treated samples was assessed in relation to fully untreated control, the positive sensitization effect of rituximab pre-treatment ($P < 0,05$) was noted as follows: within the p53-affected as well as ATM-deleted subgroups in 30% of samples and within the wild-type subgroup in 62% of samples. For the rituximab/chlorambucil testing, which was performed as a pilot study in the same manner in eight samples, the positive effect of antibody pre-treatment was also noted in some samples of all the three subgroups.

Summary/Conclusions: Our results indicate that the p53/ATM status is critical for the sensitivity of B-CLL cells to fludarabine. Regardless of the p53 and ATM aberrations, some samples are available for the rituximab-mediated sensitization to this agent. Our pilot data also support a warranty of testing a combined regimen containing rituximab and chlorambucil. Supported by grant IGA MH CR No. 8445-3/2005.

Michal:

Recent findings suggest that the programmed cell death, apoptosis, is regulated not only by the well known caspase proteases, but also by caspase-independent mechanisms. These mechanisms involve the translocation of two mitochondrial proteins AIF and endonuclease G into the nucleus, where these proteins participate on large-scale chromatin cleavage (Susin et al., 1999, Daugas et al., 2000, Li et al., 2001).

Lately, a paralogue of human AIF was discovered independently by two research groups and was named AMID (Wu et al., 2002) and PRG3, respectively (Ohiro et al., 2002). It was also assigned an ability to induce apoptosis, but the two papers interestingly differ in the proposed cellular localization of the protein. While Wu et al. (2002) observed localization on the outer mitochondrial membrane, Ohiro et al. (2002) report a diffuse cytoplasmic localization. Because these studies exploited fixation and immunostaining of the specimens, which might substantially alter the protein localization (Briggs et al., 1983), we utilized a modern approach to observe protein localization using in silico predictions and live cell fluorescence microscopy.

We firstly analyzed the aminoacid sequences of AIF, endoG and AMID/PRG3 by several bioinformatic tools for localization prediction, and then transfected various human cancer cell lines by expression vectors carrying genes for fluorescence fusion proteins AIF-tHcRed, AMID/PRG3-tHcRed and endoG-EYFP, allowing us to observe the proteins directly in living cells using a fluorescence microscope. By both methods we confirmed mitochondrial localization of AIF and endoG, but AMID was rather found in the secretory pathways organelles (ER, Golgi, endosomes). We also inquired the suggested apoptotic function of AMID/PRG3 by overexpression experiments.

Katerina:

Abstract for a conference presentation

Title: Gendering Psychology: How to Make a Difference through Diverse Professional Subjectivities

In my contribution I present a critical analysis of qualitative research based on the expert interviews I have conducted with professionals in counselling and psychotherapy from the Czech Republic and Norway. The diversity of the presented accounts will be used to challenge the category of gender which, in mainstream psychology, is often understood in a limited perspective as a personality trait based on sex differences. In my analysis I want to present, for instance, how research participants deal with tensions coming from the clash of psychological focus on the individual and the feminist imperative which focuses on society. Particular focus will be devoted to relevance of gender perspective in the Czech Republic, where discussion considering tensions between feminism and psychology is almost unacknowledged. I will relate to a more common discussion between different paradigms of psychological thinking: especially in regard to employing a qualitative approach while quantitative frameworks still prevail.

Radka:

Abstract of an article:

Title: So close, so distant: inclusion and exclusion of migrants from the former Soviet Union in the Czech Republic

Since the 1990s the Czech Republic has been part of a newly emerging Central European migration space attracting migrants from certain geographical regions, mainly from countries of the former Soviet Union, predominantly Ukraine and Russia. In the process of social inclusion in different societal spheres (e.g. labour market) those migrants face a stigma of “migrants from the East” as well as “Russian-speaking people” who are, due to historical events, still often perceived as oppressors and invaders. However, the migrants often consider the Czech Republic as a culturally close country. Using a case study of migrants’ biographies, I focus on the inclusion and exclusion of the migrants from three countries of former Soviet countries (Belarus, Russia, Ukraine) in the Czech Republic and on the negotiations of socio-cultural proximity and distance in this process. I bring a transnational perspective into the analysis and explore how the migrants’ feelings of belonging are challenged, contested and transformed in the process of migration and how the influence of particular socio-cultural context both in the Czech Republic and their country of origin on this transformation is reflected in their life-story narratives.

Ondrej:**Clothing trade in the Southern Moravia region: the case of Vietnamese Immigrant economy**

This article presents the results of our qualitative research on the economic activities of Vietnamese migrants living in the region of Southern Moravia in the Czech Republic. We attempt to answer the question of Vietnamese immigrant economy establishment and development, using the concepts of opportunity structures, bounded solidarity and enforceable trust. We also present a diagram of Vietnamese immigrant economy structure, which is based on Kesteloot and Mistiaen's classification. We focus on the specific segment of the immigrant economy - the clothing trade - development, and we analyze the various roles and involvement of participants of this segment according to their immigrant economy involvement and role. This paper is based on interviews with the Vietnamese community members and with the Czech state administration members.

Jiri:

Annotation of a conference paper

Title: Comparison of Styled Layer Descriptor specification and MapFile format in light of cartographic visualization

The aim of this paper is to compare facilities of two widely used open formats that describe the way of cartographic visualization of spatial objects in maps. Styled Layer Descriptor is a specification developed by Open Geospatial Consortium. Its purpose is to describe the way of cartographic visualization and it is often used in connection with Web Map Service specification. On the other hand, MapFile is configuration format of UMN MapServer, which is probably the most used open-source map server. This paper describes in detail facilities of visualizing basic cartographic vector symbols: point, line, and area symbols. Special attention is paid to visual variables of symbols: shape, size (width), color, orientation, pattern, and transparency.

Alena D:

The Divergence Point of Event-related Potentials during the Target and Non-target Responses in Visual Oddball Paradigm.

Aim: In this study we compared electrical activity of the human brain during the target and non-target responses of visual oddball paradigm. We studied mental operations underlying the event-related potentials (ERPs) that are elicited during this simple discrimination task.

Methods: Electrical activity of 542 sites in frontal, temporal, and parietal lobes of 14 patients suffering from intractable epilepsy was recorded during visual oddball task by means of intracerebral electrodes. Two different visual stimuli, target and non-target, were presented repeatedly in a ratio of 1 : 5. Subjects reacted only to the target stimuli by pressing a switch-button. We averaged 1800ms long EEG periods free of epileptic activity, separately for target and non-target responses. In each investigated site the occurrence of ERP comprising P300 late component was assessed in averaged target record. P300 wave is a distinct potential change peaking at 250 ? 600 ms after the target stimulus presentation. We compared the shape of thus detected ERPs with those of non-target response. In the records revealing identical shape of ERPs during the first 400 ms after stimulus presentation the point of their divergence was identified.

Results: Event-related potentials with P300 component were found in 369 from 542 examined sites. The records from 82 sites were analysed. We found ERPs of identical shape in the beginning of the target and non-target responses in 20 sites of 7 subjects. In each of these subjects such ERPs were found in one to five different sites in the brain /inferior parietal lobe, sensitive cortex, superior, medius and inferior temporal gyri, fusiform gyrus, cingulum, orbital gyri, medius and medial frontal gyri, hippocampus, basal ganglia, praemotoric cortex, amygdala, parahippocampal gyrus. Identical ERP period from the point of stimulus presentation had median duration of 288,5ms; min 226ms; max 398ms. The shortest identical ERP period in each subject had median duration of 257ms; min 226ms; max 281ms. In 15 sites of 10 subjects we identified ERPs displaying non-identical shape along the entire response to the two different stimuli. In 47 sites of 13 subjects no early components of ERPs were found.

Conclusion: Initial parts of ERPs elicited during the two different tasks of oddball paradigm can have identical shape. The shortest identical course of ERPs within one subject probably represents sensoric discrimination of the two different stimuli, which must have been finished in the point of divergence. On the contrary ERPs with longer duration of identical course within the same subject, may reflect rather decision making processes or movement preparation.

Veronika:

Dragonflies are very important indicators of ecological situations in the aquatic ecosystem. During the spring, summer and autumn 2005-2006 an semiquantitative investigation was made of dragonflies communities in differently aged anthropogenically created ponds in Havířov (1, 2, 5, 15 and 40 years old) for study succession, determine habitat preferences, differences in physico-chemical parameters and to establish their conservation value. The pH value in younger ponds was higher than in older ponds. Older localities contained less dissolved oxygen than the younger ones. According to results of RDA was age of ponds negatively correlated with pH and oxygen. The highest conductivity was measured in new water body. Values of nitrates, ammonia nitrogen and phosphates were low. The ratio of BSK5/CHSK illustrates organic pollution of these localities which probably should not have an influence on biota. There were no significant differences in physico-chemical characteristics between habitats littoral with emergent vegetation and open water. 11 species of dragonflies in newly-created locality were found in the first year. The highest abundance and number of species were discovered in five year old ponds and the lowest values in the oldest ponds.

Our results showed that five years is sufficient for formation of a relatively stable and varied community of dragonflies and newly-created ponds were quickly colonized by dragonflies. The age of these localities had an influence on structure of Odonata assemblages. Localities were affected by shorter length between them which sped up their dispersion and colonization. The presence of dragonfly communities is endangered by vegetation filled ponds and that is why human intervention is needed for protection of these biotopes. The rotatory model of succession was proved in these localities. Four Odonata species have a certain degree of endangerment in these biotopes. The greatest importance from faunistic-ecological viewpoint was the discovery of vulnerable species *Lestes virens vestalis* which created a very abundant population in these area.