

## ABSTRACTS:

### 1. Lucie Vorlickova

Persons with lumbar disc herniation and nerve-root syndrome form a considerable part of the patient spectrum in neurology and physiotherapy clinics. The aim of this research was to evaluate the influence of disc herniation on the values of vibratory sensation and to determine the values of the vibratory sensation differences between a lower extremity with root syndrome and a lower extremity without nerve-root syndrome. Vibrometer type IV was used for measurements. The research group consisted of 15 probands (age  $41.53 \pm 12.77$ ) with L4/L5 or L5/S1 disc herniation diagnosis. The control group consisted of 15 probands (age  $37.33 \pm 14.05$ ) without any chronic back pain. Statistical analysis of the values found significantly higher vibratory sensation in patients with disc hernia. There were found significantly higher vibratory sensation in the lower limb with nerve-root syndrome in all locations (metatarsophalangeal joint of the thumb, malleolus medialis and tuberositas tibiae), with the exception of spina iliaca anterior superior. This study indicates the possibility of using vibratory sensation testing as a tool that can help improve the diagnosis and therefore a treatment method for patients with disc hernia.

### Summary of points

- This is well written overall
- Very scientific in style with passive, noun phrase constructions, which is appropriate
- Minor editing required for word class (e.g. neurologist vs. neurology clinics)
- Minor editing for articles and prepositions
- Consider sequential sentences and referents (It also found...)

## 2. Jana Kopecka

### Molecular characterization of brewing and wine yeast strains in the Czech Republic

The hybrid origin of lager yeast causes problems in determination of the technologically diverse species *S. pastorianus* and *S. cerevisiae*. Wine and brewing yeast *S. cerevisiae* could be differentiated on the DNA level. In our study we chose FLO and HIS4 gene, the regions ITS, RRL2 and YBR033w and mtDNA as target sequences. A group of 28 brewing, wine and type yeast strains were analyzed by PCR and RFLP techniques. Detection of flocculation genes was not documented in any species-specific representation in any of the strains under study. Gene LgFLO, considered as typical for lager yeast, was also detected in ale yeast. Other analyses led to an identical species classification only in 7 yeast strains. Using digestion of the ITS region, 26 strains, including all of lager yeast were identified as *S. cerevisiae*; this region is thus unsuitable for identification of industrial yeast strains. Identification of ale and lager yeast should partially reflect the maximum temperature of growth. However, growth at different temperatures did not allow for reliable differentiation. Digestion of mtDNA with 4 different enzymes resulted in 9-12 restriction pattern. Identical patterns were found in 4 out of 9 ales with lager strain; wine yeast exhibited different restriction patterns from brewing and type strains.

#### Summary of points

- This is good overall and is written in an expected scientific style
- Minor editing needed for passive constructions
- Is this an individual or team study? If individual a passive sentence could replace “in our study”

### 3. Petra Amchova

#### IMPACT OF PRENATAL EXPOSURE TO MODAFINIL ON BEHAVIOURAL AND IMMUNE FUNCTIONS IN MICE

Modafinil (MDF), a psychostimulant drug, is often abused by young people of fertile age and thus there is an increasing importance to assess its potential developmental toxicity. This study investigated influence of chronic prenatal and/or postnatal exposure to MDF on anxiety level, locomotor activity and immune function in adult male mice. Pregnant female mice were given nine daily doses of MDF (50 mg/kg p.o.) or saline (SAL, 10 ml/kg p.o.). The same dosage regimen was used in their adult male offspring. Thus, there were four experimental groups: MDF- and SAL-treated offspring from MDF- and SAL-treated mothers. Horizontal (distance travelled) and vertical (rearings) locomotor activity was recorded in the open field test as follows: Day 1 – naïve animals, Day 8 – acute dose of MDF or SAL, Day 15 – one week of repeated administration. Anxiety was assessed as percentage of entries to open and closed arms in the elevated plus maze with the same schedule as in the open field. The leukocyte phagocytosis was examined by zymosan induced and luminol-aided chemiluminescence assay from blood samples. The distance travelled and the number of rearings in offspring of mothers who received MDF were lower than those of the control group. However, postnatal MDF treatment increased these behavioural parameters in both offspring groups. Prenatal treatment with MDF increased percentage of entries to closed arms compared to SAL prenatal administration. This anxiety-like behaviour was not changed after acute nor chronic postnatal MDF administration. The phagocytic activity of leukocytes was inhibited in the offspring of MDF mothers regardless of postnatal treatment. We can conclude that the prenatal exposition of mice to modafinil induced both behavioural and immune toxicity.

#### Summary of points

- This is mostly accurate and written in a distinct scientific style which is appropriate to the field.
- Minor editing for nuance of style: fertile is better when describing people than a generation
- Parallelism: keep sequential lists in same format (singular/plural)
- Avoid using symbols instead of words where figures are not present

#### 4. Martina Reslova

##### Possibilities of using Test of Colour Semantic Differential for research into organizational culture

The aim of this article is to show the possibility of using a combination of The Value Survey Module 1994 (VSM 94) and Test of Colour Semantic Differential (TCSD) for research into organizational culture. The data obtained from TCSD shows how employees consciously rated and unconsciously perceived expressions related to Hofstede's cultural dimensions (power distance, individualism versus collectivism, masculinity versus femininity, uncertainty avoidance and long-term orientation), or more precisely how they identify themselves with the researched values. The results of the VSM 94 enabled us to determine which poles of the cultural dimensions a particular working group is getting closer to. The conclusion of this article focuses on advantages and disadvantages of TCSD as well as the possibilities of its more focused use for research into organizational culture. TCSD is not currently used widely for organizational culture research although it has many possibilities of use thanks to the ability to work with respondent's unconsciousness in connection with a culture and traditions.

##### Summary of points

- This is good overall and clearly expressed
- Minor editing: no need for capitals on each of Hofstede's dimensions. If you choose to do this, capitalise the ones that follow the "versus" statements as well (parallelism)
- Team study vs. passive voice

## 5. Yen-Hsuan Huang

### Controlling the Literature: An Analysis of Judges' Social Network

The mechanism of Taiwan's literary awards is an important issue both in cultural sociology and Taiwanese literature. Since 1976, literary awards have replaced literary clubs and magazines in defining the frontier of fine literature. At that time, it also meant that the government gave a model of politically correct literary works in a more gentle way. Nowadays, the form of literary awards still exists and plays an important role in selecting fine literature writers.

Existing research uses text analysis to show that the texts which the recipients write and the ones which the judges write are very similar. Existing research also identifies how the judges reproduce themselves by choosing similar works. However, there is little research that shows how literary awards are controlled by a small number of judges. Moreover, judges are quite similar with each other.

Hence, we predict these two hypotheses can be confirmed by the data from "The Almanac of Taiwan Literature". The name lists of literary awards which were held in 2010 were analyzed to show that judges repeat in different patterns by religion and by category. The traits of the judges were also analyzed to show that they are nearly identical. Therefore, this research shows that the "judges' clique" exists. The consequences of this research helps to refine the research on the mechanism of literary awards in Taiwan. The history of literary awards and recent attempts to eliminate "judges' clique" will also be discussed.

#### Summary of points

- This is good overall though some points need editing
- Give further definitions where political or power relationship ideas are included. I'm not sure of the role of government in this, or is this the governing body of the literary award organisation.
- Some expressions can be more critically worded (taken place/replaced, points out/identifies)
- Passive sentences would have more impact in the final paragraph
- Explain the relationship of the judges with an example.

## 6. Pavlina Tesarova

### „SLICE OF LIFE“ AND ITS EDUCATIONAL IMPACT ON RECIPIENTS: THE CASE OF GERMAN AND JAPANESE ADVERTISING

Originally used as a theatrical term, a “slice of life” depicts real everyday life and situations in which individuals, families and groups of people commonly find themselves in. This concept is popular and used worldwide, and to certain extent it is also in the advertising discourse.

This paper deals with the choice and usage of specific linguistic means characteristic of this variety of advertising. It makes use of a comparison of German and Japanese television advertising. With sociolinguistic approach and on the background of two distinctive cultures, this case study analyzes German and Japanese television advertising from the year 2013. It also discusses educational impact of the said approach on the recipient.

#### Summary of points

- This is mostly accurate in language terms
- As it is very short a few more descriptions can be added as indicated in the comments
- If you offer justifications or reasons in each area, it will add considerable impact

## 7. Martin Gajdos

### A comparison of effective and functional connectivity methods in fMRI

Functional magnetic resonance imaging (fMRI) is a recent important method, used in neuroimaging. The first aim of this thesis is to develop software tool for comparison of two methods for functional and effective connectivity estimation. The basics of magnetic resonance imaging, fMRI, basic terms of fMRI experiments and general methods of functional and effective connectivity are described in this thesis. In detail are mentioned methods of dynamic causal modeling (DCM), Granger causal modeling (GCM) and independent component analysis (ICA). Practical implementations of DCM in toolbox SMP and ICA in toolbox GIFT are also shown. Monte Carlo simulations are performed with the purpose of describing behavior of DCM and GCM in dependence on several parameters. Then the concept and realization of software tool for simulating connectivity and comparison of DCM and GCM are described.

The second part is focused on DCM, a method used to estimate effective connectivity on BOLD-fMRI data, introduced by Friston et al., 2003. The aim of this part is to test how several properties of simulated BOLD signals, such as signal to noise ratio (SNR), sampling period (repetition time TR), and scaling of input signal, affect the robustness of Variational Bayesian inference under Laplace assumptions.

Finally results of DCM and GCM comparison, results of Monte Carlo simulations and results of tests of the robustness of Variational Bayesian inference under Laplace assumptions are discussed.

#### Summary of points

- This are a lot of acronyms in this, which will be OK for the subject specialist. SMP and GIFT are not given their full forms though, where all the others are.
- Look at the comments to see if you can add or edit three main areas: 1) the value of “important”; 2) connection between general and specific methods; and 3) ambiguity of “in dependence”

8. Michal Krcal

## LEVEL OF INFORMATION SUPPORT OF REVERSE LOGISTICS IN CZECH COMPANIES: CURRENT STATE AND IMPLICATIONS

In recent years, the area of reverse logistics has been continuously attracting a larger scientific and managerial audience. However, some aspects of reverse logistics management have not received proper attention so far. Information support of reverse logistics is one of the topics that is not fully developed. Although some efforts towards studying impact of information support on organizational performance and categorizing types of information technology used for information support were made, the situation regarding the intensity of research in the field of reverse logistics is concentrated only in particular fields and countries. Therefore, the goal of this study is to explore the level of information support of reverse logistics among the Czech companies, compare the findings of this study with studies from other countries, and to identify possible barriers that prohibit the information support of reverse logistics.

For the purpose of obtaining the data, two open and two closed questions, as a part of a larger research that was focused on reverse logistics in general, were sent to 167 companies of various sizes across a range of industries. Questions that were targeted on information support of reverse logistics were designed according to problems that were not satisfactorily solved during our previous theoretical research and literature analysis. The data were analyzed using descriptive statistical methods and correlations.

The results of this study show that the level of information support in the surveyed companies is below one third. Simultaneously, the bigger the company is, the more likely it is that they have implemented some kind of information support. The most used type of information support is Enterprise Resource Planning system. This fact confirms findings of other studies. Therefore, with regards to previous studies, that show that reverse logistics has a positive impact on organizational performance, and due to the low level of information support of reverse logistics revealed in this study, Czech companies should try to increase the level of the support in order to become more competitive in foreign markets.

Keywords: reverse logistics, information support, quantitative study, descriptive analysis, Czech Republic

### Summary of points

- This is clear overall and well written
- Add a brief definition of reverse logistics
- Repetition: redundant phrases (larger and larger)
- Add examples of fields and countries to preview goal
- When confirming other studies it is useful to add a citation to contextualise
- Minor points need editing for word order



## 9. Igor Kiss

The tourist business (hereinafter referred to as tourism) has an important position in the Slovak national economy. Tourism as such provides a significant amount of work placements in the labour market and helps with improvement of national regions. On the other hand, tourism has the worst position in the economy, in relation to the crisis time. Tourism is the first sector that loses its consumers and is also the last sector to return to full strength.

The main aim of this study, is to provide a theoretical and practical overview of the importance of the tourist business for the Slovak national economy, to show its share of the Slovak gross domestic product (GDP) and to show the main reasons why the performance of tourism is falling, as well as giving suggestions for restoring its strong position in the national economy.

In the first section, we will show the position of tourism from the global and national point of view. In the second section, we will show the main problems that tourism is currently dealing with. In the third section, we will show the impact of crisis on the tourist sector, as well as the reaction on the global economic crisis in the Czech Republic, Poland and Hungary. In the fourth part, we will use economic and statistical data to evaluate the potential impact of reduced value added tax (VAT) rate and the use of travel vouchers on the tourist sector, as well as on the Slovak national economy.

### Summary of points

- This is clear overall but needs editing to add critical impact to the style
- A few minor editing points can be seen in the text

## 10. Jakub Valcik

Title: A Key-Pose Similarity Algorithm for Motion Data Retrieval

### Abstract:

Analysis of human motion data is an important task in many research fields such as sport, medicine, security research, and computer animation. In order to fully exploit motion databases for further processing, effective and efficient retrieval methods are needed to identify similar chunk of motion in the whole database. However, such a retrieval task is difficult primarily due to the spatio-temporal variances of human motions and due to the rapidly increasing volume of motion data. In this paper, we represent motion features by joint-angle rotations and propose a novel content-based retrieval algorithm not requiring any textual annotations or additional knowledge about the data. The algorithm is capable of retrieving similar motions that may exhibit spatial as well as temporal variations with respect to a query-by-example motion. We analyse time complexity of the proposed algorithm and evaluate its effectiveness by comparing the search results against user-defined ground truth.

### Summary of points

- This is mostly accurate and clear
- From the first comment, impact is enhanced with passive voice where process is more important than the person doing the action
- I wasn't sure what "similar chunk" refers to. It seems very general.
- The final issue is whether it is a team study and if not whether use of the passive would again enhance the final statements.

## 11. Huiping Hsu

### Analysis of Czech Cultural Diplomacy: The Case of Cultural Tourism

Since the collapse of communism, it has taken a long time for the former socialist small states in Central and Eastern Europe to accelerate their political and economic transitions and focus on the development. The Czech Republic has used culture as its diplomatic strategy to highlight the fact that the country is part of Europe and to change its image as a former socialist country. Moreover, Czech creates its new national image and builds Prague as a city of culture; the aim to make Czech become a cultural state. This study uses a historical approach, literature analysis and policy analysis to analyze the status of home support and the promotion in the international world, and its impact for national interests and national image. In addition, culture is one of the soft powers of a nation whereby a nation encourages its cultural tourism as a method of diplomacy to achieve national interests and increase international cooperation. Therefore, this study presents was in which Czech applies cultural tourism as a way of cultural diplomacy and how the country applies cultural tourism to create its national image.

#### Summary of points

- Progression of cause and effect at the beginning. The original indicated a group of socialist countries that would have an effect on central European states, as if they were separate. This way they are embedded as one concept.
- Some editing needed of sentence structures.
- In English “Czech” is a nationality and therefore an adjective. As a nation we have to call it “the Czech Republic” unless an argument has been made for naming it differently (some Czech people would argue for the use of *Czechia*)
- Avoid naming the country twice in the same sentence (last sentence)

## 12. Lukas Chrast

### EnBase technology for recombinant protein expression

Heterologous expression of recombinant proteins represents an important part of modern biotechnology. The easiest way to produce these proteins is by using bacterial expression systems. EnBase medium technology combines cultivation in shake flask and fed-batch like culture, due to enzymatic release of glucose from starch during the cultivation.

In this study, expression of eleven characterized haloalkane dehalogenases using different media was tested. Cultures in EnBase medium resulted in higher cell densities (up to OD 55). Comparison of yields from conventional LB medium and the new EnBase B tablet medium revealed 15-fold to 35-fold improvement per liter of medium while using EnBase. At the same time, enhanced solubility was observed with EnBase B medium. Such an impact on culture productivity as well as yields reaching 2 grams per liter make EnBase B an efficient medium for biotechnological production of recombinant proteins.

### Summary of points

- This is clear overall, in a traditional scientific style
- A few minor edits or articles and prepositions are included
- The only real comment is related the bacterial expression systems and the following sentence. Are these examples?

### 13. Pavlína Balatá

#### Essential methods used for building business excellence in production factory

##### Abstract

The article focuses on description and definition methods and tools, which can be used for development of excellent quality. The last century has been associated with forward looking technology and trailblazing inventions that have made history. No, when tools and methods are defined, right usage Best Practice (BP) and Quality-Mindset in praxis is often depreciated. This case study provides collection of integration methods and tools used in high-level production factories in the domestic and national market. Effective sharing of BP and Quality-Mindset can help companies establish benchmarks, identifying deficient practices for replacment, maintaining process capability, reducing reinvention, duplication and risk, saving cost through better efficiency and productivity and avoiding costly mistakes. Many models have been introduced for organizational excellence.

Among these models, BP is able to improve the principles of Total Quality Management (TQM) for production organizations. The enhancement of organizational quality knowledge and improvement of quality knowledge management is one of the important criteria of BP. The aim of this study was to evaluate of quality knowledge management in a production factory based on the Excellence model (with confirmation European Foundation for Quality Management (EFQM)).

Methods: This qualitative and cross-sectional descriptive-analytical study was performed in 2011. The statistical population was managers, employees and people from production, documents and processes of national industrial organization with sub branch in Czech Republic. Data were collected by the standard checklist of excellence model created by following company (the version of 2010-2011). Data were analyzed based on the Network analysis (used from reason objective determined whether elements of the quality mindset are influenced by observed elements and profile these elements according information, creating influence analysis with numbers active sum, passive sum, every element had assigned position (one point) in a portfolio matrix). The results were plotted and analyzed by Excel 2007 Software based on the obtained scores in the matrix.

Results: Thirst the studied company (management level) gained 81 (81, 46%) scores out of 100 points of the thirst section "Company goals" criterion. In addition, the gained 66 (66,85%) of the score of "Company standards", 47 (47,75%) of the score of "Company cooperation", 67 (67,75%) of the score of "Company Leadership" and total results was 62 (62,02%) of the score of "Q-Mindset of the company". In production (employee) was 89 (89,11%) of the score of "company goals", section "information flow" was scores 91 (91,32%) and section "company standards was score 79 (79,36%).

Conclusion: The studied company has taken appropriate measure in infrastructure development by the definition of Quality-Mindset of the company, but promotion in leadership and cooperation and efficient use of new built criteria teams and new department (which will be developed as best praxis) is recommended.

##### Summary of points

- There are a few points to develop here. Look carefully at the comments.

- Aside from the minor language points, look at the longer sections where I have added comments. Some would benefit from redrafting, especially in the methods and results. In the methods, take out the specific contents of influence analysis and remove the brackets. Otherwise it is along interruption in the flow of argument.
- The results would benefit from restructuring. A good way to do this is firstly turn it into a bullet list and then edit each result for parallelism. After doing this reconnect it as a paragraph with a sequential flow of passive sentences. This way it will be appropriate in a quantitative style of writing.