

## **FINAL PROGRAM**

### **3rd Scientific World Kurdish Congress** (WKC2013)

SCIENCE AND CULTURE FOR PROGRESS IN KURDISTAN

زانست و كلتوور بۆ پێشەكەوتنى كوردستان

11-13 OCTOBER 2013 • STOCKHOLM, SWEDEN

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### **3rd Scientific World Kurdish Congress Timetable**

April 2013 First announcement and call for papers

**30 July 2013** Deadline for abstracts or full papers

**30 August 2013** Authors notified of decision for paper acceptance

**30 August 2013** Preliminary program and registration

**30 September 2013** Completed manuscript of selected oral paper to WKC

October 2013 Book of abstract and conference program

**11-13 October 2013** 3rd World Kurdish Congress in Stockholm- Sweden

**February 2014** The 3rd edited volume will be published by Cambridge Scholars Publishing, UK



### **Objectives of the Conference**

CONGRES

WORLD

• To provide a highly visible forum for establishing new contacts among Kurdish and non-Kurdish academics to share their knowledge and expertise as well as contacts, to support each other through networking.

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orld

- To work towards creating an international Kurdish lobby to gain support from other international communities and diaspora to serve Kurdistan
- To encourage participants to be proactive and create diverse think thank groups in their own area of expertise to support the Kurdistan Regional Government

A major task of this year's World Kurdish Congress (WKC) is to restructure its organization with new leadership. Since the current president and founding director of the WKC, Prof. Alan Dilani will be leaving after completing his three-year term; a new Board of WKC Directors needs to be put in place. This changeover should inspire a new generation of Kurdish academic and scientists to step forward and continue to develop the vital network for the Kurdish Diaspora.

**Language:** The presentation at the conference will be in English.





# Supporting Peace and Prosperity in Kurdistan and Middle-East

Welcome to the 3rd Scientific World Kurdish Congress organized in partnership with the Kurdistan Regional Government (KRG) October 11-13th in Stockholm. The goal of the WKC 2013 is to continue the following last year's successful World Kurdish Congress (WKC 2012) in Erbil, with our partnership KRG to discuss cutting edge scientific, economic, cultural and health programs that will provide a solid foundation for the future of Kurdistan.

The 3rd World Kurdish Congress will precede this important achievement, focusing upon academic and scientific solutions to current challenges within Kurdistan. The forum in Stockholm will further strengthen the unification of Kurdistan as it continues to develop into a progressive and modern society, providing peace and prosperity in the Middle East.

Dear Colleagues and Friends,

Welcome to Sweden and to the 3rd Scientific World Kurdish Congress (WKC2103) at the one of the oldest cultural building palace Musikaliska in the beautiful city of Stockholm, October 11-13, 2013.

As the Kurdistan Region continues to undergo significant economic and political change, it is increasingly placed at the center stage of Middle East affairs—socially, economically and politically. Many countries in the region have recognized that progressive societies need to be democratic and inclusive, recognizing the rights of minorities as they move towards stronger and more sustainable economic growth. This equation clearly includes the Kurdish population in the region.

At this moment, Kurdistan is situated upon the leading edge of change. A growing awareness of the importance of the democratic rights of the Kurdish people, along with the political and powersharing changes in the region, have placed Kurdistan in the forefront of Middle East business and development opportunities.

The unique scientific focus of this Congress will offer delegates and academics original and stimulating topics during a broad range of plenary sessions. Posters of the latest innovations and solutions in many fields will provide a unique opportunity for delegates to network among themselves.

All sessions will be presented by highly qualified Kurdish and non-Kurdish scholars including international scientists from prestigious universities and research institutes, medical professionals, psychologists, economists, agronomists, and political scientists. These speakers will bring a wide range of perspectives on how to best serve our people and society with definable evidence and a scientific approach as Kurdistan continues its major developmental phase. The rich selection of conference sessions will highlight the importance and value of interdisciplinary research.

Topics to be addressed at the Congress will include the latest research findings in the field of health and medical science, agriculture, higher education, economy, politics, human rights, sustainable and healthy development, and the infrastructure necessary to support the Kurdistan Regional Government in its mission. The high quality of scientific research, as well as a fascinating range of case studies, ensures that participants will enjoy a unique, knowledge-enhancing experience.

We appreciate your effort participating in the 3rd Scientific World Kurdish Congress. We wish you a rewarding and enjoyable congress in Stockholm as you greet the country of the Kurdish diaspora in Scandinavia and network with new Kurdish colleagues.



Alan Dilani Founder and president of WKC



Falah M. Bakir, Minister of Foreign Relations (Diaspora)



# **3rd Scientific World Kurdish Congress**

#### Friday October 11th, 2013

9:00 - 12:00	Registration at the conference venue Musikaliska, Nybrokajen 11, Stockholm (only by confirmation) and Poster Display
13:00 - 15:00	Opening remarks, Carol Prunhuber, Journalist and Writer
	Opening of the 3rd WKC and Welcome Speech by KRG Minister Falah Mustafa Bakir, Head of Department of Foreign Relations "Minister of Diaspora" Fredrik Malm, Member of Swedish Parliament, Chairman of the Kurdish and Swedish Parliamentary group Alan Dilani, Founder and President of WKC Science and Culture for Progress in Kurdistan
15:00 - 15:30	Coffee/ Tea Break and Posters Display
15:30 - 17:30	Session 1: Lessons Learned from a Successful Diaspora Chair: Carol Prunhuber (USA)
	The Experience of the World Jewish Congress Natan Sharansky, Chairman of the Jewish Agency, Former minister and Deputy Prime Minister of Israel The Experience of the World Hellenic Inter-Parliamentary Association Jim Karygiannis, Member of Federal Parliament, Canada The Experience of the Armenian Diaspora Kaspar Karampetian, President of European Armenian Federation, Armenia
	Discussion (30 minutes)
17.30- 19.30	Welcome Dinner and Networking
19.30- 22.00	Kurdish Classical Cultural Music Performance

#### Saturday October 12th, 2013

8:00 - 8:30 Late Registration

08:30 - 10:30 Session 2: The State of Agriculture and Water Resources Chair: Dawood Atrushi (*Kurdistan/Norway*)

> **Keynote: Serwan Baban** (*Kurdistan /UK*) Minister of Agriculture and Water Resources Progress in the Agricultural and Water Resource Sectors in Kurdistan

Nasik Najar (Sweden) Successful Handling of Water and Wastewater Management
 Jamil Jalal (Kurdistan, Iraq) The Effect of Geographical Factors on Land Use Planning
 Soran Hama Amin (Kurdistan, Iraq) Utilizing the Olive Tree for Developing Green Areas in Kurdistan
 Abdolrahman Khezri (Norway) Norwegian model of reproductive efficiency in farm animals

#### Discussion (30 minutes)

10:30 - 11:00 Coffee/ Tea Break and Posters Display

#### 11:00 - 13:00 Session 3: The Science of Healthcare Treatment

Chair: Mariwan Baker (Denmark)

Sabah Jmor (UK) Improving Breast Cancer Service in Kurdistan
Azad Ibrahim Najar (Sweden) Blood Flow inside the First Artificial Heart
Mohammad Shaikhani (Kurdistan, Iraq) Diverse Infectious Diseases in Iraqi Kurdistan
Kawa Amin, Kimi Adamson (UK) Geographical Visualization of the Human Health Network
Soza S. Baban (UK) The Critical Role of a Center for Molecular Diagnosis of Infectious
Diseases in Healthcare system of Kurdistan
Shvan al Hussein (Germany) Supporting Rehabilitation Kurdistan after Orthopedic procedures

#### Discussion (30 minutes)

13:00 - 14:00 Lunch, and Posters Display







14:00 - 16:00	Session 4: The State of the Economy and Natural Resources Chair: Vian Ahmad (UK)
	Keynote: Almas Heshmati, (South Korea) The Role of Natural Resources in Southern Kurdistan's Economic Development
	<ul> <li>Hedi Rasul (Sweden) Geophysical Methods for Road Transportation</li> <li>Khazal Auzer (UK) Effective Institutional Design in the Governance of the Oil and Gas Sector</li> <li>Karwan Ghazi Fendi (Kurdistan, Iraq) Public Transportation and Its Effect on the Reduction of the Use of Private Cars in Kurdistan</li> <li>Erlend Paasche (Norway) Tracing the Iraqi Kurdish Migration System through a History of Change</li> </ul>
	Discussion (30 minutes)
16:00 - 16:30	Coffee/ Tea Break and Posters Display
16:30 - 18:00	Session 5: The State of Higher Education in Kurdistan Chair: Adnan Aydin (USA)
	Ala Saadeghvaziri (USA) Challenges Facing Higher Education: Beneficial Implications for Kurdistan Universities Dawood Atrushi (Kurdistan/ Norway) The state of Higher Education in Southern Kurdistan Mohammad Sharifi (Australia) The Prospective of Medical Education in Kurdistan
	Discussion (15 minutes)
Sunday Oc	tober 13th, 2013
8:00 - 8:30	Late Registration
08:30 - 10:30	Session 6: Peace and Democracy in Kurdistan Chair: Mordechai Zaken (Israel)
	Mordechai Zaken (Israel) Security and Prosperity in Democratic Kurdistan Kara Ali Eskerie (Australia) Using the National Security Framework Ayar Ata (UK) A Study of Kurdish Diaspora in London: Question of History and Identity Tara A. Yahiya (France) ICT for Citizen Safety in Kurdistan
	Discussion (30 minutes)
10:30 - 11:00	Coffee/ Tea Break and Posters Display
11:00 - 13:00	Session 7: Politics, Power Sharing and Nation Building Chair: Fereydoon Rahmani <i>(Kurdistan/Canada)</i>
	Keynote: Michael Gunter (USA) An Analysis of Kurdistan National Building
	Osman Suoor (UK) The Self- Securitization of Kurdish Identity in Turkey Peshawa A. Muhammed (Kurdistan, Iraq) US Perspectives on Kurdish Independence Seevan Saeed (UK) From PKK to KCK: Transformation of the Kurdish Struggle in Turkey Renad Mansour (UK) Pragmatic Diplomacy of the Kurdistan Regional Government
	Discussion (30 minutes)
13:00 - 14:00	Lunch, and Posters Display
14:00 - 16:00	Session 8: WKC Annual Report and the Future Direction, KRG Statement Chair: Alan Dilani (Sweden) Founder and President of WKC
	<ul> <li>Nomination of the new WKC President and Board, representing Kurdish academia residing in all continents</li> <li>Nomination of the Advisory Committee to review the future and viability of the WKC</li> <li>Nomination of the location for the 4th World Kurdish Congress in October 2014</li> </ul>
	Discussion & Final Remark of WKC2013
16:00 - 17:00	Coffee/ Tea Break and Posters Display, Networking



# **Poster Presentations**

- P01 Shahram Aazam (Canada) EMRs and its Benefits
- P02 Frzand sh. Abdullah (*The Netherlands*) "Komalkari"; A Project for Radicalizing European Kurd Rawti Shakh as the First Trans-National Web-Based Islamic Salafi Jihadi Movement – Through Europe to Kurdistan
- P03 Kawa Amin (UK) Emergency Mobile Health Clinic for Kurdistan
- **P04** Pshtiwan Sadiq (*Kurdistan Region*) Secession of the Kurdistan Region According to the Right of Self Determination
- P05 Mariwan Baker and Claus F. Behrens (*Denmark*) Comparison of 3-D Ultrasound Imaging and Kilo-Voltage Imaging for Determining Daily Variations in Position of Prostate during Radiotherapy
- **P06 Delovan F. Barwari (USA)** A Two-State Solution to End the Ongoing Violence and Political Crisis in Iraq
- **P07** Ala Berzinji (Sweden) E-Government Solution for Iraqi Kurdistan Region
- **P08 Deborah M.J.** *(Kurdistan Region)* The Perspective Roles of Civil Society, Private Sector and State in Development of the Federal Region of Kurdistan (FRK) as an Emerging De-Facto State Within the Republic of Iraq, in the 21st Century and Beyond
- P09 Baadal H. Elias, Sayran A. Abdulgafar and Shilan I. Abo (*Kurdistan Region*) The Effect of Noise Pollution on Arterial Blood Pressure and Heart Pulse Rate of Dentists in their Dental Offices in Duhok City- Iraq
- P10 S. I. Essaa and M. H. Kakaeeb (*Malaysia*) A New Secure Framework for Online Banking Systems
- P11 Saman Esmaeilnejad (*Kurdistan Region, Iran*) Application of Valproic Acid as a Small Molecule Effective on Pluripotency Induction to Enhance Repair Capacity in Kainic Acid Induced Hippocampal Degeneration
- **P12 Tara Fatehi (Australia)** Women's Health: In Kurdish Societies and Kurdistan
- P13 Boyan Hadzhiev (Bulgaria) New Media and the Development of Modern Society
- P14 Lena Insulander and Maria Köhler (Sweden) Gaps in Professional Competences in Kurdistan Business Including Field Study in Northern Iraq April 2011 and August 2012
- **P15 Havjin Jacob (Norway)** The Importance of Basic Science for Cancer Treatment
- **P16** Jamil Jalal (*Denmark*) Effect of Climate on the Use of Olive Trees to Develop Green Area in Sulaimania
- **P17** Jamil Jalal (*Kurdistan Region*) Utilization of Wild Rosa Canina for Development of Vegetation Area and Water Harvesting in Sulaimania Gardens
- P18 M. H. Kakaeea and S. I. Essa (*Malysia*) New Coding Technique for Optical Communications Systems
- P19 Hero Karimi (UK) Beyond Diaspora What Now?
- P20 Sait Keskin (UK) Democratic Society and Radical Democracy or the Nation-State and Liberal Democracy in the Process of Nation Building
- **P21** Jaafar H. Khidir (*Kurdistan Region*) Scientific Research and Its Importance with Special References to the Kurdistan Region-Iraq
- P22 Kristiina Koivunen (Finland) Ecological Genocide in Kirkuk
- **P23** Shahnaz Koji (Canada) The Implementation of an Educational and Care System for those Suffering from Dementia in Kurdistan Dementia Society of Kurdistan
- P24 Aram A. Mustafa (Australia) Mobile Online Booking System

for Medical Practices

- **P25** Karim Najar (Sweden) The Greater the Plasticity of the Brain, the Easier It Becomes to Communicate and Achieve Well-Being
- P26 Azad I. Najar (Sweden) New Laparoskopic Suturing Technique – Animal Study
- **P27** Ziyad Raoof (*Poland*) The Polish Experience Within the Scope of Cooperation with Diaspora as a Valuable Example for the Kurdish Process of Nation Building
- **P28** Dilshad M. Razawa and Erik Knudsen (UK) Cinematizing Genocide: Exploring Cinematic Form and Its Relationship to the Hidden Voices of the Kurdish Genocide of 1988
- **P29** Simon M. Schleimer (Germany) Back to an Outland The Return Migration of Kurdish Children to Iraqi Kurdistan
- **P30** Shuela M. Sheikh-Abdullah (*Kurdistan Region*) The Morphological Features of Mica and Chlorite Minerals in Fine Sand Fraction in Some Forest Soils of Kurdistan Iraq
- P31 Naske Vahabzadeh (Kurdistan- Iran) A Better Urban Lighting for New Kurdistan

#### **The Scientific Committee**

Prof. Alan Dilani, Ph.D. Architect/ Public Health, Sweden, Chair

Prof. Almas Heshmati, Ph.D. Economics, Seoul- Korea Prof. Serwan Baban, Ph.D. Minister of Agriculture, KRG, Kurdistan

Prof. Nawzad Saleh, MD. Ph.D. Karolinska Institute, Stockholm, Sweden

Prof. Tara A. Yahiya, Ph.D. Computer Science, University of Paris, France

Prof. Vian Ahmed, Ph.D. University of Salford, UK Prof. Adnan Aydin, Ph.D. The University of Mississippi, USA Prof. M. Ala Saadeghvaziri, PhD, New Jersey Institute of Technology, USA

#### **Organizing Committee**

Prof. Alan Dilani, Ph.D. Architect/ Public Health, Sweden Dr. Carol Prunhuber, Ph.D. Journalist and Writer, USA Chia Madani, M.Sc. Computer Science, Sweden Halkawt Hikmat Ali, M.Sc., Council of Swedish Government, Sweden Mariwan Baker, Ph.D. Candidate Copenhagen University Hospital, Denmark Alex Atroushi, Invest in Kurdistan, Sweden Ali Barhoon, M.Sc. Tetra Pac, Sweden Ferhat Sönmez, Student, University of Stockholm, Sweden

#### **Board of World Kurdish Congress**

Alan Dilani, Founder and President Almas Heshmati, South Korea Serwan Baban, Kurdistan Carol Prunhuber, USA Chia Madani, Sweden Halkawt Ali, Sweden

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Alan Dilani Founder and President of WKC, Science and Culture for Progress in Kurdistan

Professor Alan Dilani is a founder and General Director of the International Academy for Design and Health (IADH). www. designandhealth.com He holds a Ph.D. in Health Facility Design from the Royal Institute of Technology, Stockholm. He lectures worldwide and is the author of numerous articles and books in the field of Design and Health. Dr. Dilani received the Award 2010 from US Academy of Architecture for Health for his promotion of high quality design research.

### The Vision for Health Promotion to Create Healthy Society in Kurdistan

Today's rapid movement of individuals and populations living in ever larger, multi-cultural, urban environments, combined with the equally rapid evolution of the knowledge society means that the world we live in today is one with few boundaries. In the 21st Century, the health of nations is a global issue, and Asian's improving health status is dependent on recognition of its international co-existence. As the world undergoes a significant economic and demographic shift, the Middle East region will be increasingly at the centre stage of world affairs - socially, economically and politically. In 1997, the World Health Organization identified that the health "arena", including priority settings and frequently used spaces such as the workplace, schools, hospitals, correctional institutions, commercial offices, public spaces within our towns and cities, and indeed our homes, should be at the centre of health promotion activities in the 21st century. During the 66th meeting of the General Assembly of the United Nations, the socio-economic challenge of non-communicable diseases was discussed for the first time in September 2011. The quality of built environment infrastructure could have a significant impact on human health and we must bring this understanding to the design and health

professions in an effort to reduce the prevalence of lifestyle diseases. Many Middle East countries have recognised that progressive societies aiming to achieve strong and sustainable economic growth must also be healthy societies. Growing awareness of the importance of health promotion and the need to invest in healthy and sustainable public, social, institutional and domestic infrastructure is placing Middle East countries at the forefront of opportunity and the leading edge of change.

Research on Salutogenic direction highlights the impact of design factors that inspire the designer and planner toward healthy society to develop the condition that stimulate health and wellbeing and thereby promotion of health and prevention of diseases in all level of society. An increase in the consideration of Salutogenic design approach leads to social innovation and economical growths that requires interdisciplinary application of sciences such as Architecture, medicine, public health, psychology, design, engineering with culture, art and music!

Key words: Salutogenic design, stress reducing, health promotion, psychosocial factors

#### Natan Sharansky Chairman of the Jewish Agency, Former minister and Deputy Prime Minister of Israel

#### The Experience of the World Jewish Congress

Natan Sharansky, born in Donetsk, in the Former Soviet Union, was a Prisoner of Zion and a leader

in the struggle for the right of Soviet Jews to immigrate to Israel as well as a spokesman for the human rights movement. Subsequent to his request to make aliyah, Mr. Sharansky was arrested on trumped up charges of espionage. Natan Sharansky was tried in a Soviet court, convicted and sentenced to 13 years in prison. He served nine years in the Gulag with many stretches in solitary confinement. He was released following massive public campaigns by World Jewry and officials in the West. On the same day that he was released he made aliyah. In the first few years in Israel, he established the Zionist Forum to assist in the absorption of Soviet olim. In the 1990's, he established the Yisrael B'Aliyah party in order to accelerate the integration of Russian Jews. He served in four successive Israeli governments, as Minister and Deputy Prime Minister. He is the author of three bestselling books and is the recipient of the Congressional Medal of Honor and the Presidential Medal of Freedom.

Natan Sharansky remains a champion of the right of all people to live in freedom and believes that the advancement of freedom is critical to peace and security around the world.

In 2009, Natan Sharansky was elected Chairman of the Executive of the Jewish Agency. As chairman, one of his great missions is to ensure the continued existence of the Jewish People.





#### Jim Karygiannis Member of Federal Parliament, Canada

The Experience of the World Hellenic Inter-Parliamentary Association

Jim Karygiannis is the Liberal Member of Parliament

for Scarborough-Agincourt.

On May 2, 2011, he was re-elected for an eighth consecutive term having been first elected to the House of Commons in 1988.

Jim is the Liberal Party Critic for Veterans Affairs. He previously served as the Liberal Critic for Multiculturalism, with responsibility for stakeholder and community outreach.

Prime Minister Paul Martin appointed Mr. Karygiannis Parliamentary Secretary to the Minister of Human Resources and Skills Development in October 2005. Prior to this, Jim served as the Parliamentary Secretary to the Minister of Transport, with special emphasis on Transport and the Environment. He was appointed to this post in December 2003.

He has been a member of several Standing Committees of the House of Commons, including the Standing Committee on Citizenship and

Immigration. Jim served as an Associate Member of the Standing Committees of the House of Commons on Canadian Heritage, Foreign Affairs and International Development and Justice and Human Rights. Jim has been the Liberal Party's Associate Critic for Small Business and Associate Critic for the Departments of National Revenue and Multiculturalism.

Scarborough-Agincourt is the most ethnically diverse federal riding in Canada. Jim Karygiannis is an effective voice for the people he serves, taking their concerns, on a wide variety of issues, including: immigration; taxation; justice; and, Canada's global responsibilities, to Caucus and the House of Commons for debate.

Jim Karygiannis has long been a strong advocate for social justice and human rights. He has presented Motions in the House of Commons condemning acts of barbarism perpetrated against religious and cultural minorities throughout the world. These Motions passed with unanimous consent of the Members of Parliament. He has travelled extensively speaking out against human rights violations.



#### Kaspar Karampetian President of European Armenian Federation, Armenia

#### The Experience of the Armenian Diaspora

He born in Athens, Greece Multilanguage, studied culture and history and actively working with

Armenian diaspora since many years and had eth following position in his active life;

- Member of the Armenian Cultural Association "Hamazkayin".
- Member of the Armenian General Athletic Union and Scouts "Homenetmen"
- President of the Armenian Youth Federation of Greece (1976-1984)
- Member of the Financial Committee of the Armenian Community of Greece (1998-2007).
- President of the Armenian National Committee of Greece (1992-1996 / 2001-2011)

- Member of a Committee supervising the implementation of HELLENIC AID (MFA of Greece) programs in Armenia (2004-2010)
- Member of the board of the European Armenian Federation for Justice and Democracy (EAFJD) (2003-2011)
- President of EAFJD (2012)
- Publication of many articles in the daily Armenian Newspaper of Greece AZAT OR.
- Publication of researches on historical events in the Greek Newspaper TO VIMA and the Greek language magazine ARMENIKA.
- Honorary citizen of the city of Noyemperian in Armenia (2005)
- Member of the Armenian Section of the International Academy of Natural and Social Sciences (2006)





#### Serwan Baban Minister of Agriculture and Water Resources

Professor Baban is Minister of Agriculture and Water Resources, Kurdistan Regional Government, Kurdistan Region of Iraq. He was Vice Chancellor of the University of Kurdistan Hewler (UKH). His academic and management career was developed through working in universities in the UK, The Caribbean, Australia and Iraq. He has founded and directed several successful research centers and Institutes worldwide. He has published over 150 journal papers, chapters in books and conference proceedings in addition to 3 edited books.

#### Progress in the Agricultural Sector in Kurdistan Region

The agricultural sector in the Kurdistan region has suffered from a series of unfortunate events including: war, political conflicts and damaging national and international polices. These have devastated its infrastructure and consequently, Kurdistan went from being a producer to a consumer within a short period of time.

This paper will report on the progress of the implementation of a specifically developed road map which has, since June 2012, aimed to achieve food sufficiency and security for the region. The road map provides a way forward to rehabilitate and improve the agriculture sector based on a vision that introduces effective modern production, training, management and reflective systems for sustainable agriculture and food production in the region.



#### Nasik Najar Senior lecturer School of Engineering

### Experiences of Successful Handling are Lessons to share

The pressure on water and wastewater systems (WWS) is constantly increasing due to population growth, urbanization deterioration of infrastructure and climate changes.

There is a big difference in the way the general goals - needs for safe water supply and sanitation- have been implemented in different countries depending on priorities, economic conditions, organizational structure and staff competences. The experience developed in Sweden and in large parts of the Western world within WWS, management and technology has been judged to be of great value to be transferred to other countries with a lower standard of water and wastewater systems. The aim of this study was to analyze the situation in Sweden and Kurdistan region of Iraq regarding to the management of WWS and create a comparative view to facilitate the understanding of the environmental problems and the Swedish strategies of used measures. The specific objectives is to identify the important key factors of progress and success and the important strategic long-term decisions and their implementations within water and wastewater sector

The objectives are explored through the following research questions: 1) What lies behind the progress and the success in Swedish policy regarding WWS on national and local levels? And how different principles have been put into practice? This was achieved by studying how the international legislation could be implemented on national and local levels, how the governmental concern about environmental problems contributed to solve many of these problems and what role the municipalities had in this development.

2) How the actual conditions in Kurdistan related to the organization, infrastructure, services and implementation of policies within water and wastewater sector.

3) Which of practices, policies, technologies and strategies that have been successfully used in Sweden are possible to be taken and applied directly in Kurdistan? And which of them should be tailor made to Kurdistan circumstances?

The method used are mainly based on literature studies, previous made questionnaire surveys, case studies and interviews and gathering of unpublished data from the Swedish and Kurdish authorities. The study showed a shortages in many pillars of the WWS in Kurdistan and showed that the complexity of the water network is not understood by the staff, and that the water quality and wastewater management are issues of great concern in Kurdistan any examples of successfully used policies, strategies and practices in Sweden can be used in Kurdistan without improvement. Swedish tariff system is one example of management systems which can be used if adapted to Kurdistan conditions. New structure for the organization of water and wastewater sector in Kurdistan are suggested to facilitates a shift of responsibility from the central agencies to municipality level. And a new methods for improving the staff competences within the sector are recommended.

Key words Water and Wastewater Management, Swedish Performance, Kurdistan Region, policies, services, organisation, comparison.



#### Jamil Jalal Professor, Department of Geography, University of Sulaimania

Professor Baban is Minister of Agriculture and Water Resources, Kurdistan Regional Government, Kurdistan Region of Iraq. He was Vice Chancellor of the University of Kurdistan Hewler (UKH). His academic and management career was developed through working in universities in the UK, The Caribbean, Australia and Iraq. He has founded and directed several successful research centers and Institutes worldwide. He has published over 150 journal papers, chapters in books and conference proceedings in addition to 3 edited books.

### Effect of Geographical factors on Utilization of shallow and rocky soil area in Sulaimania governorate

Rainfall is among most important geographical factors affecting vegetation cover development in the world. Rainfall fluctuation and its shortage in the few last decades is among the major problems facing vegetation cover growth and agricultural production in the middle east including Kurdistan.

Annual rainfall in Sulaimania governorate is in decline from around of 700 mm to around 500-600 mm and more less than that in some years. In addition to that, there has been rainfall shortage from 1-3 years every five years. Thus, agriculture production and vegetation cover obstacles hazardous and restrictions.

Biological water harvesting is among the effective means for facing rainfall shortage, which was used in this study through grafting fruits that normally grow under irrigation system on wild fruitless and nondelicious hawthorn rootstocks. Hawthorn rootstocks is among the native flora of mountain regions in Sulaimani governorate, which resist severe ecosystem including shallow, rocky, calcite and eroded soils, with high and low temperature.

The results of this study show that it is possible to graft irrigated economical fruits such as quince, loquat, pear, hawthorn and apple

which require about 700 mm rainfall per year or 7000m3 water /ha/ year. In addition to graftage, locally delicious yellow famous hawthorn on natural wild hawthorn rootstocks under rain fed conditions which needs about 450 mm annual rainfall, that means it is entirely dependent on rainfall. Consequently biological water harvesting by graftage results in water harvesting of about 7000m3 water /ha/ year and makes producer more interested in using wild hawthorn rootstocks which resists severe ecosystems of shallow, rocky and eroded soils. At the same time, it helps in facing drought years, which considers as one of the greatest problems of current time and in the distant future facing plant flora development in the Kurdistan region. Moreover, planting grafted hawthorn rootstocks with several fruits on the same tree provide the facility of facing the reciprocal climatological conditions due to differences in time of flowering and maturity as well as expanding horticulture areas and plant flora, region of Sulaimania governorate and even in plains with supplementary irrigation as an important tool for drought challenge.

This study is a joint research between Kurdistan Institute for Strategic Studies and Scientific Research and University of Sulaimani.

Keywords: Geography of Kurdistan, severe ecosystem, Sulaimania governorate



#### Soran Hama Amin Professor of Natural Resources Lecturer of Climatology

### Effect of Climate on Utilizing of Olive for Developing Green Area in Sulaimania Governorate

Olive is one of the native trees of the Middle East and Iraqi-Kurdistan region which can survive severe ecosystems including hot and cold climates, sandy and rocky soils and even soils with 40-60% calcite content. The growing area in Iraqi-Kurdistan is limited to around 250 Ha, while several countries such as Spain and Italy each grow more than 2 million Ha of olive, which play an important role in their economies.

Data on the growing area of olive were collected through direct visitation to the areas where they are grown in the Sulaimania governorate, and through the collection of data from agricultural directory of Sulaimania.

Results from collected data showed that growing of olives in the Sulaimania governorate is by means of drip irrigation system, which is entirely dependent on supply of water from ground water. In contrast, 90% of the world's olive is dependent on water from precipitation. Moreover, olive can survive low rainfall of 300mm and can give satisfactory yields with rainfall of 500 mm without irrigation.

In general the total rainfall in the Sulaimania governorate rarely drops below 300 mm, during the years of 1941to 2013. This makes olive among the most suitable and economic trees for utilizing in such sandy and rocky soils of the Sulaimania governorate, which constitutes 20% of the total area to the vegetation area. Therefore, Olive tree has a great role in the re-vegetation process of the aforementioned ecosystem. Moreover olive should be included in any program of renewing the Kurdistan region forest. Olive also plays a great role in developing tourism in the region. In conclusion, agricultural lands should not be allocated for olive tree growing; instead, bare lands should be used.

The majority of olive tree fields were planted in the best agriculture land, which should be allocated for strategic field crops like wheat, rice, and maize. Moreover, the aforementioned lands are rich with montmorillonite, which swells when it is exposed to precipitation and shrinks when it is dry. Thus resulting in deep cracks in the soil which causes the breaking down of the roots and weakening of trees 3) Which of practices, policies, technologies and strategies that have been successfully used in Sweden are possible to be taken and applied directly in Kurdistan? And which of them should be tailor made to Kurdistan circumstances?

The method used are mainly based on literature studies, previous made questionnaire surveys, case studies and interviews and gathering of unpublished data from the Swedish and Kurdish authorities. The study showed a shortages in many pillars of the WWS in Kurdistan and showed that the complexity of the water network is not understood by the staff, and that the water quality and wastewater management are issues of great concern in Kurdistan any examples of successfully used policies, strategies and practices in Sweden can be used in Kurdistan without improvement. Swedish tariff system is one example of management systems which can be used if adapted to Kurdistan conditions. New structure for the organization of water and wastewater sector in Kurdistan are suggested to facilitates a shift of responsibility from the central agencies to municipality level. And a new methods for improving the staff competences within the sector are recommended.

Key words Water and Wastewater Management, Swedish Performance, Kurdistan Region, policies, services, organisation, comparison.

#### Abdolrahman Khezri 1. Department of natural science, Hedmark University college, Norway

### A successful Norwegian model of reproductive efficiency in farm animals, extendable for future of Kurdistan

#### Problems, objectives and goals

As a generalization, some 30-40 % of the sperm population in mammals does not survive cryopreservation in Al even with optimized protocols. On the other hand, lack of field fertility and semen quality data have existed as a management problem in animal husbandry for many years in Kurdistan.

#### Material and methods

Semen sample from the best sire would be analyzes in vitro for determine the best candidate for AI. This analyzes included assessment of acrosomal integrity, viability, analyzing of DNA status, mitochondrial activity, capacitation of sperm cells using flow cytometry, objective estimation of sperm motility and morphology parameters using CASA and evaluation sperm damage in molecular level. Beside of laboratory assays, all data regarding to field fertility (fertility rate, milk, beef production and disease prevalence in cattle cases) for all daughters registered. Using statistical studies, relationship between sperm quality and field fertility would be analyzed and each year a number of best of the best bulls after passing the cut off standards would be selected as elite candidates for next generations.

#### Results

Individual differences are available among the sires therefore, bulls associated with low quality semen excluded. Cryopreservation led to significant changes in semen quality, some of the changes had negative relationship with field fertility results.





#### Sabah Jmor Department of Surgery, Ormskirk Hospital, UK

#### Improving Breast Cancer Service in Kurdistan

Breast cancer is the most common cancer in the Eastern Mediterranean Region (EMR) and

appears to have increased rapidly in the past few decades. Women in Kurdistan have about 1/3 the UK's risk of breast cancer (31% of female cancer).

Problems: Breast cancer is increasing in Kurdistan due to dietary and life style changes. Patients with breast cancer present late and the outcome is not favourable. Most patient been treated in private unequipped clinics or travel abroad for treatment. Clear and comprehensive plan to treat breast cancer in Kurdistan has not been established.

Objective: Early detection of the disease improves the outcome and survival. Specialist breast centre supported by multidisciplinary team providing comprehensive service to women with breast cancer improves the survival

Method: Data provided by the cancer research UK and WHO regarding the epidemiology and the outcome of the disease.

Discussion: In the (EMR) breast cancer appears to be a disease of the younger generations with incidence rates, being higher in women < 60 than in older women. Breast cancer appears to have increased rapidly in the past few decades in EMR.

At least 1500-2000 new patients diagnosed with breast cancer every year in Kurdistan (KRG). Three centres should be established in the 3 large cities of Kurdistan at the beginning. Each centre needs at least 4-5 specialist breast surgeons, 2 oncologists, Radiologist and pathologist and 1 plastic surgeon and 5- 6 breast care nurse and 5 breast radiographer and 2 digital mammography and 2 sonography machines.

Department of health in Kurdistan needs to establish a national cancer control committee to put forward plan for early detection of the disease, provide well-equipped specialist centre for treatment and clear guidelines to combat breast cancer.

Role of Kurdish diaspora:Training and advice could be provided by specialist Kurdish diaspora to the centres through a program coordinated by the department of health and committee established from the diaspora doctors. Designated Kurdish specialist should be encouraged to attend advanced courses or clinical attachment between 6-12 months which should be facilitated by diaspora specialist.

Conclusion:Breast cancer is the most frequent cancer in female and it is increasing in number and present at advance stage in Kurdistan. Urgent plan needed to combat the disease. Kurdish diaspora could play a major role in providing expertise, training and advice.

Key words: Breast cancer, incidence

3) Which of practices, policies, technologies and strategies that have been successfully used in Sweden are possible to be taken and applied directly in Kurdistan? And which of them should be tailor made to Kurdistan circumstances?

The method used are mainly based on literature studies, previous made questionnaire surveys, case studies and interviews and gathering of unpublished data from the Swedish and Kurdish authorities. The study showed a shortages in many pillars of the WWS in Kurdistan and showed that the complexity of the water network is not understood by the staff, and that the water quality and wastewater management are issues of great concern in Kurdistan any examples of successfully used policies, strategies and practices in Sweden can be used in Kurdistan without improvement. Swedish tariff system is one example of management systems which can be used if adapted to Kurdistan conditions. New structure for the organization of water and wastewater sector in Kurdistan are suggested to facilitates a shift of responsibility from the central agencies to municipality level. And a new methods for improving the staff competences within the sector are recommended.

Key words Water and Wastewater Management, Swedish Performance, Kurdistan Region, policies, services, organisation, comparison.



#### Azad Ibrahim Najar Urological department in Västerås, Sweden

#### The blood flow inside the real heart which is the first swedish artificial heart

Heart disease is the leading cause of death in industrialized countries today. Heart transplantation is considered as a standard option for patients with advanced heart failure today. These patients have a very poor survival rate.

Many people with heart failure die, while waiting for a transplanted heart. The numbers of donated hearts are strictly limited. Less than 4000 receive a transplanted heart among 100 000 patient with sevear heart failure annually, This means that there is a great need for another solution - a cardiac prostheses!

There are several cardiovascular prostheses. Among these are only two as Total Artificial Heart, TAH, which replace the entire heart. The rest are supporting heart pumps (Heart Assist Device). Unfortunately, none of these offers a long time solution as an artificial heart.

Real Heart, which is invented by Azad Najar is a new generation of total heart prostheses, which is designed to be more appropriate to the body than the current cardiac prostheses, and also to be more like our natural heart physiologically. It is designed to be a permanent

solution and replace cardiac activity for long time.

In order to find a permanent solution, it was naturally to focus on thromboembolic complications of heart prostheses, and studying this phenomenon carefully to minimize the risk of emboli. Two factors are important in the thromboembolic problem: The first factor is the foreign material, but more important, is the blood flow in the prostheses and the flow pattern. The second factors, however, none of the manufacturers (especially manufacturer for TAH) have been solved and considered.

Our Team in Sweden have a great focus, studied and make some research on the flow of blood inside heart prosthesis. We determined the factors which influence the flow of blood inside Real Heart. We can briefly mention that the blood flow is almost identical in Real Heart in comparison with the natural heart. We are participating in this congress to high light the flow of blood inside the heart prosthesis.

To study the blood movements in detail in the natural heart was impossible when other cardiovascular prostheses were designed, but developments in medical technology and the development of 3D MRI technology has paved the way for understanding the human heart better, and to study blood flow closely in our hearts.





#### Mohammad Shaikhani School of Medicine, University of Sulaimani, Iraqi Kurdistan Regional Government

#### Diverse Infectious Diseases in Iraqi Kurdistan

Background: Before the nineties communicable infectious diseases was common in Iraqi Kurdistan

& it was common to encounter seasonal waves of such diseases from Typhoid fever, acute viral hepatitis, cholera, amebiasis, diphtheria, measles, Rabies & tetanus.

Objectives: To review the current status of communicable infectious diseases in Iraqi Kurdistan & its relation to the changing economic, environmental, social & educational aspects of the community & the effect of globalization in that respect.

Materials & methods: We reviewed the internationally & locally published data & the hospital records of the current status of communicable infectious diseases in Iraqi Kurdistan covering the period from 1990 till now.

Results: We found that still many communicable infectious diseases are prevalent in Iraqi Kurdistan, some of them are occurring in epidemic form line Cholera & typhoid fever& others occur in mini epidemics like Avian (variant) flue, while others occur in sporadic forms Like measles, whooping cough , tuberculosis, HIV. Other infectious diseases had recently emerged that were not previously known to occur in the area like Fasioliasis, bisidomycosis & HIV. Additionally there is a good number of chronic carriers of Hetatitis B & C viruses, many of them had progressed to chronic liver disease.

Conclusion: In spite of important economic, environmental, social & educational development & the increase vaccine coverage for vaccine preventable diseases in Iraqi Kurdistan, but still there are many communicable infectious diseases some of them are among

the vaccine – preventable diseases & some occur in epidemic forms, moreover there are many new emerging diseases previously not known to occur in our community.

Key words: Communicable diseases, epidemics, emerging infections. 3) Which of practices, policies, technologies and strategies that have been successfully used in Sweden are possible to be taken and applied directly in Kurdistan? And which of them should be tailor made to Kurdistan circumstances?

The method used are mainly based on literature studies, previous made questionnaire surveys, case studies and interviews and gathering of unpublished data from the Swedish and Kurdish authorities. The study showed a shortages in many pillars of the WWS in Kurdistan and showed that the complexity of the water network is not understood by the staff, and that the water quality and wastewater management are issues of great concern in Kurdistan any examples of successfully used policies, strategies and practices in Sweden can be used in Kurdistan without improvement. Swedish tariff system is one example of management systems which can be used if adapted to Kurdistan conditions. New structure for the organization of water and wastewater sector in Kurdistan are suggested to facilitates a shift of responsibility from the central agencies to municipality level. And a new methods for improving the staff competences within the sector are recommended.

Key words Water and Wastewater Management, Swedish Performance, Kurdistan Region, policies, services, organisation, comparison.

#### Kawa Amin, Kimi Adamson Geographical Visualization of the Human Health Network

### Spatial and temporal geographical visualisation of human health networks and epidemiology

The attempt to have a single centralised all encompassing health system to monitor the health of the nation has been plagued with concerns over costs, data security, vulnerability, training, resilience and data volume. In contrast the decentralisation of the internet provides a complex heterogeneous mix of independent systems and networks. The synergy between such networks provides a plethora of opportunity for small to large scale service providers to interact and exchange data through their respective Application Programming Interface (API) using web services. In a decentralised system there are concerns over duplication of effort, lack of adequate protection of Intellectual property, with cost and profitability playing a more significant role as justification for investment in small ventures. There are however the creation and dynamism of ideas in smaller outfits.

In this paper we propose the creation of temporal visualisation of a

health system using geographical information system to analyse and address epidemiological concerns. This is not new the works of Dr John Snow in 1854 Cholera outbreak in a Soho London map and the infected Broad street water pump. Dr Snow found the correlation between those that drank water from the pump and those infected with the disease. The approach adopted will be multidisciplinary and cross-domain involving a range of professionals including practising Health care professionals, Doctors, GIS practitioners and Software developers. The development would be a blend between using local available data sources and overlaying these data with collected data from the proposed system. The idea is not to reinvent the wheel, but to harness and offer a solution that can interoperate within existing networks or improve upon any existing solutions. This paper will also explore the creation of web-based automated open source tool which collates and processes epidemiological data for real-time analyses. Keywords: Geographical Information system (GIS), Application Programming Interface (API), pervasive computing, Epidemiology



#### Soza S. Baban PhD in Molecular Medical Microbiology, The University of Nottingham, Nottingham, UK

### The Critical Role of a Center for Molecular Diagnosis of Infectious Diseases in Healthcare system of Kurdistan

The provision of healthcare in Iraq had suffered significant delay in development and modernization for more than thirty years as a result of wars and long sanctions. The first step towards cure is diagnosis, the faster and more accurate the diagnosis, the easier and better they are. The consequences of medical diagnosis are particularly severe in Kurdistan, especially in the area of infectious diseases, where thousands people weekly are affected by respiratory infections, with one third amongst them not having access to a proper diagnosis. In addition, high prevalence rate of hepatitis B, C viral infections has been reported recently. The Region is also endemic for other communicable diseases like Crimean Congo haemorrhagic fever and anthrax besides the problem of antigenic shift and drift that occur in influenza virus and the dissemination of NOVEL corona virus known as MERS-COV in the neighbouring countries.

There is a clear high risk that multi-drug resistant pathogens which are important agents of healthcare-associated infections are not properly detected in the laboratory because of inadequate diagnostic testing facilities. An important deficiency in the service which needs to be highlighted is the lack of modern molecular diagnostic services for rapid detection of tuberculosis disease and treatment. Lack of this service will lead to the potential spread of Multidrug resistant mycobacterium tuberculosis (TB) with its immense undesirable consequence on our healthcare system. Molecular diagnostic testing has become an important new tool in clinical laboratory for detection and treatment of infectious diseases. They have allowed the discovery of several clinically important pathogens and reduced the dependency of laboratories on old-fashioned techniques. Providing good laboratory practice is an integral part of disease diagnosis, treatment and prevention as well as plays an important role in developing disease surveillance program. When applied wisely and selectively, molecular testing represents an indispensable part of the routine laboratory practice. Establishing a Clinical Molecular Diagnostic Centre (CMDC) as one of the first facilities of its kind in Kurdistan is of paramount importance and essential as it is the first step to gain tremendous improvement in bridging the gap between the patients care and healthcare management. One of the primary strengths should be focused on providing a wide range of diagnostic nucleic acid-based tests for hereditary disorders, cancer

diagnosis, hematologic malignancies and infectious diseases for the ultimate aim to have a positive impact on patient care. In this presentation, we aim to discuss the main strategies to implement modern molecular diagnostic testing services and quality assurance program and highlight its pivotal role in the delivery of safe and effective therapy for many diseases in the future.

Keywords: molecular diagnostics, infectious diseases, inherited genetic disorders, cancer diagnosis, healthcare system.

#### Shvan al Hussein medic-doctor in an ambulant orthopedic Rehabiliation, Germany

### Project for Kurdistan – Iraq an ambulant modern orthopaedic – clinic

A Rehabilitation is important for the process of helping a person to reach the fullest physical, psychological, social, vocational, avocational and educational potential consistent with his or her physiologic or anatomic environmental limitations and desires and life plans.

Methods: The Treatment how Treat in Rehabilitation is: Injuries to the musculoskleleta-system(bones,joints,ligaments,muscules,tendons,n ervs); - Fractures and dislocations; - Back pain, neck pain, ruptured discs; - Joint pain (Knee, ankle, hip, shoulder, elbow); - Arthritis and bursitis; - Osteoarthritis of the knees.

Other Services in the Rehabilitation: Joint infiltrations for Osteoarthritis of the knees; - Trigger Point infiltrations; - Fracture Management / Casting / Splinting: - Electro-diagnostic Medicine; - Functional Capacity Evaluations (FCE); - Independent Medical Examinations; - Complete Physical Therapy Services; - Cervical and Lumbar Med-X-Rehabilitations Programs; - Pre-and Post – Employment Evaluations; - Return-to-work Evaluations; - work conditioning; - Impairment Ratings – Based on actual capacity and AMA guidelines.

Results: This all give not in there, the infrastructure are negative. The more of this all is not on the medical- standard level and need good plan and modern technology. Many diseases and conditions problems are there. It support the financial help, the social-help and medical-help. There is a need for Training Development – Teams for Tools and Skills.

Conclusion: My experience from a modern ambulant orthopaedic rehabilitation is that there is a need for intervention after an operation, this is especially important for patients with nerve problems.

Recommendations: To build a modern orthopaedic centre in Kurdistan-Iraq

Needs: Financial investments, training for staff, specialised medical centres containing tools, equipment and techniques.

In my presentation I describe "Rehabilitation after orthopaedic procedures" based on my experience in Kurdistan in October 2010 As an example I focus on one of the most common problem of the people in Kurdistan and this is Lumbar disk and after a surgical intervention of spinal column operation.





#### Almas Heshmati Professor of Economics, Department of Economics, Sogang University

Almas Heshmati is Professor of Economics at Department of Economics, Sogang University, Seoul, South Korea. His research interests include applied microeconomics, globalization, development strategy, efficiency, productivity and growth with application to manufacturing and services. In addition to more than 100 scientific journal articles he has published books on EU Lisbon Process, Global Inequality, East Asian Manufacturing, Chinese Economy, Technology Transfer, Information Technology, Water Resources, Landmines, Power Generation, and Development Economics.

#### The Role of Natural Resources in Southern Kurdistan's Economic Development

The economy of Kurdistan Region has developed rapidly in recent years as part of a reconstruction of the destroyed infrastructures. Currently the economy heavily depends on revenue from oil and the gas industry. There is suspicious that oil may be a possible cause of socio-economic ills in the society. This study aims at investigating the curse of oil in the Region. In particular we look at the possible link between the curse of oil and the fall of agricultural sector. In addition we also discuss the curse and blessing effects on other areas such as education, labour market, manufacturing, public employment programs, bureaucracy and corruption. The result shows that there is no direct link between oil curse and fall in agriculture sector. Fall in agriculture sector is a result of general technology development, growth of manufacturing and service development, urbanization and destruction of the sector by the former Iraqi regime as well as external water management programs. A possible sign of curse can be observed in labour market, growing public sector, bureaucracy, corruption, inefficiency, inequality and concentration of assets, while the blessing is evident in many areas including education, health, utilities, housing, nutrition, openness, infrastructure and economic development and international recognition of Kurds legitimate demand for their rights.

#### Hedi Rasul PhD Candidate, Stockholm, Sweeden

#### **Geophysical Methods for Road Transportation**

Road as one of transportation vein in body of civilized society need to be constructed and maintained regularly to connect different parts of country which requires passing over, through or beneath different geological layers with different hydrological criteria.

For this congress I will focus mainly on using geophysical methods and instruments that can be used during, before and after construction of roads. My interest in this topic has developed when I was working during 2007-2008 in road construction as civil engineer and found out how water can be problematic and how subsurface investigations would benefit the design and construction of roads if they can be carried out faster with less cost, beside that during maintenance all the unexpected objects like cables, pipes, ...etc can be monitored by geophysical instruments, which will cause more precise construction process without damage other facilities, on the other hand as part of my PhD study I started already with modeling section of road in finite element modeling software (COMSOL multiphasic 4.3) in hope of finding the hydrological criteria and its impact on roads especially water table and content, which results later will contribute road quality by knowing the movement of ground water and behavior of infiltrated water regarding the road layers.

In my presentation I would like to show the process of geophysical methods that can be used in Kurdistan for solving different problems confront with road construction and finding out that which method is best fit the area, some solutions by geophysical methods like Ground Penetration Radar, and Resistivity methods will be discussed.

From literature reviews I concluded that the above geophysical methods can be adopted in Kurdistan for future projects efficiently and contribute our country development and construction, with monitoring ground water which is one of important national resources and prevent pollution of ground water by this huge construction process and development in different parts of Southern Kurdistan especially major cities.



#### Khazal Auzer PhD Candidate, University of Leicester, UK

### Effective Institutional Design in Governance of Kurdistan Regions Oil and Gas Sector

The Abundance of natural resource can be translated into 'blessing' or 'curse' in resource-rich countries. The reason behind the diverse outcomes of the natural resource come back to the success or failure of governments in terms of dealing with their substantial wealth such as oil and gas in resource-rich countries. This research aims to highlight that Kurdistan Region as newly oil and gas producer needs to take account of this fact that the effective pattern or model of governance of the national petroleum sector can be a potential and just alternative for building strong institution in order to purse the longterm economic development.

Keywords: Dutch disease, Volatility of oil price, Diversification, political economy

#### Karwan Ghazi Fendi Highways and Bridges Department, Duhok Polytechnic University, Iraq

#### Policies and Practices for a Modern Integrated Transport System in Kurdistan

As a result of the sanctions against Iraq, including Iraqi Kurdistan region, imposed throughout the 1990s and the recent unstable political grounds, significant pressure was put on Kurdistan's public transport systems in the last two decades. The high demand for the public transport services coupled with the crippled economic growth has led many owners of private vehicles to offer informal transport services. Kurdistan region at the moment needs a modern integrated transport system. A Local Transport Plan (LTP) sets out a way forward to deliver public needs through short, medium and long term transport solutions.

Buses are common in public transport method. They operate on streets and have an extensive network of lines. Public transport infrastructure plays an important role in the operation and function of an efficient, convenient and safe public transport system. Appropriate infrastructure forms a vital part of the customer experience and helps to make public transport competitive and viable alternative to private car travel. Bus stop design and location is recognised as a crucial element to improve the quality of bus services.

The second element of the public transport is the tramline. Trams can carry large numbers of people quickly and efficiently. Tramlines

hugely impact positively on the environment producing cleaner air and a healthy cut in carbon emissions making this scheme well worth investing in and an excellent value for money.

It is widely recognised that an increase in walking and cycling for short journeys in urban areas could significantly reduce traffic congestion, improve the quality of the urban environment, promote improved personal health, and contribute to a reduction in carbon emissions. This paper demonstrates walking and cycling as forms of sustainable transportation through brief analysis of local governments and individual's decision making with respect to short journeys in urban areas.

The paper provides a fresh insight into the Park & Ride facilities and the possibility of how this provides a useful input to the urban development. The paper presents an example of one of the best sustainable and managed transportation systems in Europe, namely, Nottingham City Transport, in the UK. This paper seeks to understand the reasons behind popularity of public transport in Nottingham and the level of recognition of its effectiveness in reducing private car use. The paper discusses the possibilities of adopting such systems in Iraqi Kurdistan re region with a special attention to policies and practices using such systems.

Keywords: transportation planning, integrated systemscomparison.





#### Erlend Paasche Peace Research Institute, Oslo, Norway

### Tracing the Iraqi Kurdish Migration System through a History of Change

Ten years after the US-led invasion of Iraq, the Kurdish ascendancy - relative stability, rapid development and economic growth - contrasts with a long and bloody history of persecution and genocides. This paper explores the emigration and post-conflict return migration to Iraqi Kurdistan based on more than 100 in-depth interviews with Iraqi Kurds in Norway and the UK, and Iraqi Kurdish returnees coming back from these countries, in addition to 6 focus group discussions and several key informant interviews. Economic growth and relative political stability in the Kurdistan region of Iraq after the war's 2003 apex prompted the return of some exiled political elites. Most of whom had fled persecution or violent conflict during the period 1975 till the late 1990s, tended to be granted asylum by sympathetic host states in Europe, and were generally, as elites, comparatively well positioned to establish themselves abroad and to capitalize on investment opportunities during the early years of the post-invasion economic growth of the Kurdistan Regional Government (KRG). Their remittances formed a lifeline for families and friends during times of hardship and combined with displays of wealth during return visits, transnational marriages, images from

Western media, and their very success upon return, to produce a partly idealized image in an impoverished Iraqi Kurdistan, of Europe as a vehicle of social mobility. This idealized Europe was particularly attractive for non-elite, would-be emulators without networks of patronage, who have continued to emigrate from the late 1990s until today in spite of increasing macroeconomic growth and relative stability. This new wave of mass migration to Europe has increasingly consisted of young, unskilled and single male target earners applying for asylum in search of a better life. Seeking to emulate the success of the elite emigrants, they faced structural constraints as increasingly restrictive asylum regimes and economic downturns in Europe led to irregularization, marginalization, and unfavorable exchange rates visà-vis the booming Kurdish economy. As these would-be emulators return from during the 2000s, often forcibly, they are largely emptyhanded and face disappointed households, rising costs of living, general stigmatization, and poor prospects in an increasingly specialized labor market. This paper argues that much like the brightest light creates the sharpest shadow, the former successes of elite migrants exacerbate the absolute failure of those who tried in vain to emulate them.

Key words: migration, history





Ala Saadeghvaziri Professor of Civil Engineering, New Jersey Institute of Technology University Heights, USA

**Opportunities and Challenges facing Higher** Education: Beneficial Implications for **Kurdistan Universities** 

It is well known that higher education is going through fundamental changes, some even argue disruptive transformation. This is attributed to several factors such as very high cost of higher education, very low retention and graduation specially in STEM fields, advancement in technology, profile of student body in the digital age, desire to provide higher education to the global village, the need for individual and customized content and delivery mode, and the fast changing needs of the economy and the industries served, thus, the need for just in time delivery of subject matters.

Massive open online courses (MOOC) is identified as a development that can address some of these problems and it has ballooned in popularity over the past couple years. MOOC providers now includes major and high profile universities in the US such as MIT, Harvard, Berkeley, Univ. of Washington, and many others (edX), as well as private sector (Coursera, Udacity, to name a few) and venture capitalists. There are now thousands of courses that are freely available online and many students - especially adult learners - have signed up for them. More importantly MOOC provides the mean for other countries and regions of the world - such as Kurdistan - where availability of gualified faculty is limited to offer high guality courses and training. This will allow them to extend their programs and enhance their curriculum.

Another issue for a 21st Century University is timely delivery of relevant materials that is suitable to serving the industry and ensuring growth of the economy in a timely fashion. Generally speaking faculty and programs in the US are quite responsive to bringing new knowledge into the curriculum. But what higher education needs to remain dynamic and relevant is a fundamental change in "how" we offer the technical and professional subjects by infusing relevancy in a timely manner so that an adolescent of the age of instant messaging is not turned off before it's too late. Stated briefly we need to "fast-track" them into practical/professional subjects without compromising on the fundamentals. There is a need to break away with existing course-based system that is centuries old and deliver subject matters in a modular format. This will greatly benefit from MOOC and will directly address the needs of the economy in a timely manner while ensuring that students remain engaged and do not phase out, critical to major issues of retention and graduation facing higher education. Student learning outcomes, assessment, quality control, and students desire to interact with the faculty are issues/concerns that require further consideration in a purely or heavily technology based education system such as the MOOC platform. This paper will discuss opportunities and challenges facing 21st century universities. It will also provide details of a hybrid model to take advantage of these opportunities to broaden and enhance offerings of universities in Kurdistan region while addressing concerns and issues such as desire for faculty interaction, guality, learning outcomes, assessment, and continuous improvement.

#### Dawood Atrushi Vice President for International Relations, University of Dukok, Norway

#### The state of Higher Education in Southern Kurdistan

Dawood Atrushi is Vice President for International Relations at the University of Dukok, UoD (since May 2006). He attended the UoD, College of Engineering, in September 2004 after spending 17 years of his life in Norway where he did his University studies. He has worked as Assistant professor at the Norwegian University of Science and Technology (NTNU) in the city of Trondheim in 1993-1995, Associate Professor at the Haugesund University College (HiH) in 1996 and consultant at different private Norwegian companies during 1997-1999. He took his PhD in Civil Engineering in March 2003 at NTNU.

At the UoD, he is responsible for developing and overseeing a variety of university-wide initiatives and policies related to international research, education, and collaboration. He is also responsible for reviewing proposals to develop inter-Faculty initiatives on international topics and, working with the Deans and the faculty, and stimulates the development of proposals. These efforts promotes best practices across UoD's international operations, which may provide international study opportunities for undergraduate, graduate, and faculty.

Atrushi was Fulbright Scholar at the Michigan State University for 10 weeks during Summer 2010, and initiated a partnership program with MSU. He has represented the UoD in many International meetings and conference both in Europe and in USA.

He speaks Norwegian, English, Arabic and Persian. Kurdish is his mother tongue.





#### Mohammad Sharifi Sharifi Faculty of Medicine, University of New South Wales, Sydney, Australia

### The Prospective of Medical Education in Kurdistan

Contemporary Medical Education has developed into a student-centered pedagogy in which students learn to solve the problem (mainly diagnosis) using their own knowledge or acquiring knowledge guided by a tutor. This self-directed learning motivates students to develop effective problem solving, effective communication skills and team work in a flexible learning environment. This method of teaching is called Problem Based Learning (PBL) and initially was developed in the late60s by Howard Barrows and his colleagues in the medical school at McMaster University in Hamilton, Ontario, Canada. Today medicine can be taught over virtual private networks quite easily and efficiently, very suitable for newly emerged Kurdish Nation. The lectures and tutorial notes can be uploaded and students would have access to these materials prior to their PBL/Scenario sessions guided by a tutor. The tutor facilitates the students' discussion, however, the laboratorial and clinical works are exceptional and students should have sufficient contacts with their lecturers and clinical facilitators in laboratories and hospitals.

This method of teaching was very rapidly adapted by other medical

schools, other health sciences, math, law, education, economics, business, social sciences, engineering and architecture. The today's medical program is more than a traditional medical education. It is an integrated and organised medical knowledge base as a platform for a life time professional and personal learning through experience and reflection.

It is an effective interaction with others through communication, an effective interaction with oneself through reflection and an interaction with learning resources through information literacy and critical analysis. The PBL curriculum stimulates the students and assists them to learn and see the relevance of learning materials to their future roles. It also maintains their enthusiasm and motivation toward learning and professional attributes.

Conclusion

The traditional medical program has failed to address the life time learning process of health professionals and their personal, professional attributes and capabilities. In contrast PBL curriculum engages students in constructing knowledge and maintaining it throughout their learning and professional life.

Keywords: Medical Education; Medicine; PBL



#### Mordechai Zaken The Hebrew University of Jerusalem

#### Security and Prosperity in Democratic Kurdistan

Based on new oral sources, carefully analyzed, this research explores the relationships between Jewish subjects and their tribal chieftains in Kurdistan, focusing on the patronage and justice provided by the chieftains and the financial support provided by the Jews to endure troubles and caprices of chieftains. New reports and vivid tales unveil the status of Jews in the tribal setting; the slavery of rural Jews; the conversion to Islam and the defense mechanisms adopted by Jewish leaders to annul conversion of abducted women. Other topics are the trade and occupations of the Jews and their financial exploitation by chieftains. The last part explores the experience of Jewish communities in Iraqi Kurdistan between World War I and the mass-migration to Israel (1951-52).

#### Kara Ali Eskerie Australian National University studying a Masters degree in National Security Studies

#### Using the National Security Framework

This article analyses the role of the gas and oil laws promulgated by the Kurdistan Regional Government (KRG) pursuant to Article 140 of the Iraqi Constitution in the Kurds' national security. Firstly, it will assess the modern discourse surrounding national security. Arnold Wolfers argues that national security is an 'ambiguous' term. Security is essentially the preservation of a group's core values. A group's interaction with those surrounding it and the context of that interaction ultimately determine these core values and how to preserve them. Of particular importance is Wolfers' argument that national security is both an objective and a subjective term. Using this line of argument, this article will examine the historical context which the Kurds have engaged in, the process of the identification of their national identity and the core values that the Kurds wish to preserve. It will then seek to identify the Kurds' definition of 'national security' and the significance of energy laws under Article 140 to the KRG in its attempts to maintain and advance the core values of the Kurds in Iraq. Secondly, using a risk assessment framework and applying Ulrich Beck's perspective on insecurity as a basis for decision-making, the essay will argue that changes in the Iraqi Government's oil and gas policies in the last few years have posed a significant objective and subjective threat to key Kurdish interests. However, escalating disputes with the Iraqi Government on these issues also pose a level of insecurity threatening the KRG's advancement of key national and regional interests. Dialogue with neighboring states such as Iran and Turkey could be vital in facilitating the KRG's efforts to preserve autonomy in the coming decades. Thus, regional partnerships are important for the Kurdistan Region's national security. However, these partnerships can clash with Kurdish inter-group relationships in the region, requiring more care in coordinating efforts with other Kurds in the region so as to advance the national security of the Kurds in Irag and more broadly in the region.





#### Ayar Ata Refugee Studies Faculty of Arts and Human Sciences, London South Bank University, UK

#### A Study of Kurdish Diaspora in London: Question of History and Identity

My research question is twofold: dealing with Kurdish displacement history and their diaspora identity in London. I aim to explore a historical argument about the Kurds as "powerless victims of the First World War". I will look critically at the history of the modern nation state in the Middle East as a context for explaining and for gaining a better understanding of the systematic marginalization and displacement of the Kurds since 1918. I will also aim to demonstrate the complex position of the Kurds throughout history: their different status as "victims", "actors", "subjects", "minority group", and "citizens" and their diaspora formation and transnational identity.

The second part of this study is to evaluate the integration experience of the Kurdish Diaspora in London. I will attempt to understand the shifting position of the Kurds from "victims" in the region to "active citizens" in London or Kurdish Londoners, including looking at the place and perspectives of the young and second generation Kurds who were born in Britain. This part will discuss the notion of "identity" and the idea of "home" and "belonging" in the light of contemporary theories of Refugee and Diaspora Studies and where necessary challenge them. Furthermore, I also aim to uncover the gaps in the existing literature and critically highlight the dominance of policy and politics driven research and thereby justifying the need for a new approach. This will include looking at the living experience of members of the Kurdish Diaspora communities in London; a critical analysis of history and identity, considering the perspectives of both groups and individuals.

Key words: Kurdish Londoner, citizenship, living experience, identity



#### Prof. Tara A. Yahiya PhD Telecommunications and Networking, Paris SUD University, France

Dr. Yahiya received her PhD from the University of Pierre & Marie Curie, France (2008). She joined the University of Paris SUD as associate professor in 2009. Her teaching, research and practical experience spans across the fields of telecommunications and wireless networking, including 4G mobile networks, quality of service and performance evaluation. She is a leader of many national and European projects in France, and nominated by the ministry of higher education & research to represent France in COST WiNeMo Action. She is the chair and the organizer of many summer schools, workshops, conferences and serving as technical program committee in several international congresses.

#### ICT for Citizen Safety in Kurdistan

There is no doubt that Kurdistan is one of the most secure region in Iraq and the peace and tranquility prevail in the region, however there are many reasons that threaten the citizens safety and the public security, which may not be limited to terrorist threats, but also to natural disaster, fire, crime, manifestations, hooliganism behavior during or after the match.

Accordingly, citizen safety is starting to be an important issue, especially that this topic is witnessing a great advance during the last few years. This is due to the rapid growth of technological solution regarding this issue recently. For example, new safety solutions like advanced analytics, smart technologies and improved communications raise the quality of information gathered and drive a more proactive approach to serious crime and terrorism. The advent of the Smartphone and prevalence of its usage bring an opportunity to engage citizens in efficient and real time intelligence sharing, enabling faster reaction from higher authorities.

Citizen engagement with higher authorities and Smartphone usage in crime prevention is by no means a new concept. There are many cases where Smartphone have been used to record crimes and the evidence has been provided to successfully prosecute. A more valuable use of Smartphone is capturing data and communicating with high authorities in real time to prevent a threat before it occurs, to reduce response times, and give support to first responders.

Being the leader for a European activity called Citizen Safety in the City, with our European partners, academic and industrial one, we conducted interesting research in this area, and have achieved important results. Our results show that by introducing new Telecommunication technology in this domain, it proves that we can improve better and better the safety of citizen in the City as well as public security.

The results that we obtained are suitable to be applied in Kurdistan, as we are not based really on very expensive technology, we are mainly based on application in Smartphone that contact the higher authority whenever a problem that threatens citizen safety occurs. We hope to apply our solutions in Kurdistan to make this region safer in term of personal safety.

Keywords; Information and Communications Technology (ICT), 4G, Wireless and Telecommunications





#### Michael Gunter Professor of Political Science, Tennessee Technological University, USA

#### An Analysis of Kurdistan National Building

In the midst of all the changes the Arab Spring has brought to Egypt, Tunisia, and Libya, among others,

the intelligent lay, media, and policy worlds have paid much less attention to analyzing Kurdish nation building. Indeed, one might even refer to the most recent stage of this long continuing process as the Kurdish Spring: Sudden demands by the Kurds for true democracy including cultural, social, and political rights and their immediate implementation before the window of opportunity closes. Or as Ofra Bengio recently described the resulting situation: "Alongside the tectonic sociopolitical changes taking place in the region as a whole ... the borders separating the Kurds of Iraq, Turkey, Syria and Iran no longer appear as sacred or secure as they once did.i Thus, the Kurdish Spring refers to the sudden empowerment of the Kurds after being for so long mere victims whose only friends were the mountains and the Kurdish challenge to the existing borders established by the Sykes-Picot Agreement after World War I.

However, before surveying this new climate, it also should be noted that Kurdish nation building did not just begin in late 2010 and early 2011, but in some ways has been going on for more than a century. Furthermore, in more recent decades: In Turkey (at least since the Kurdistan Workers Party (PKK) formally began its insurgency in August 1984), as well as in Iraq since the days of Mulla Mustafa Barzani beginning in the early 1960s, but especially since the end of the two U.S. wars against Saddam Hussein in 1991 and even more in 2003. These two wars led to the creation of the Kurdistan Regional

Government (KRG) in northern Iraq, the most successful attempt at Kurdish statehood in modern times. As of 2013, the KRG has become virtually independent possessing its own government, army, thriving economy, and flag. The KRG also issues visas for foreign visitors. Baghdad's troops to the south are not even allowed to enter into the territory of the KRG! With its new found allies the United States and (most ironically) Turkey, the KRG belies the old adage that the Kurds have no friends but the mountains.

On a lesser scale Iranian Kurds too have long been going through their own off again/on again process of nation building, the failed Mahabad Republic of Kurdistan in Iran in 1946 under its revered leader Qazi Muhammad still being the best example and also still resonating in the development of pan-Kurdish nationalism. Even the Syrian Kurds experienced violent protests in March 2004 when rioting broke out at a football match in Qamishli, inspired in part by the Kurdish successes in neighboring Iraq.

Returning to Iran, one should note that until recently, the Iranian Kurds were bitterly divided into several competing parties, constant protests, and, in the case of the Kurdistan Free Life Party (PJAK) ensconced in the Iraqi Kandil Mountains just across the border from Iran, even armed struggle against the Iranian regime. During the past two years, however, a more-or-less cease-fire has fallen over the Iranian Kurds and little has been heard from them. During 2012, the long-divided Iranian Kurds have also begun to achieve more unity. Some speculate that this might be the prelude to the next explosion in the Kurdish world.



#### Osman Suoor

#### Societal Security: The Self- Securitization of Kurdish Identity in Turkey

This paper examines whether the Copenhagen School's (CS) new concept of societal security and securitisation which are delineated in Buzan et al's Security: A New Framework for Analysis, can provide an insight into the issues arising between state and its sub-state groups in non-Western democratic states. The case of Kurds in Turkey as a sub state group, this paper suggests, is a true example of providing an understanding of societal security and securitisation in the non-Western Democratic state of Turkey. This paper demonstrates that Turkey's approach to security is the traditional approach which concentrates only on the securitization of its main referent object, state's sovereignty. However this approach to security, founded and based on a mere Turkish ethnicity and disregarding the rights of the existence of Kurds as a separate group from Turks in Turkey, has created an act of homogenisation. This act has led to the creation of constant and serious threats to the identity of Kurds and subsequent societal insecurity of Kurds as a sub-state group in Turkey. This paper also outlines that sub state groups possess their own referent object (identity), similar to state's sovereignty, which is important to let the group survive and evolve as a secured community. When the group's identity is under existential threat from the state, the group will resort to various self-securitisation approaches in order to protect their identity, which conserves the groups as 'we', from disappearance. By giving the example of the case of Kurds in Turkey and in addition to the above, this paper will examine and evaluate how the Kurdish securitising actors (leaders) have undertaken both peaceful and violent approaches in order to securitise (reconstruct) the Kurdish identity against the state's threats and it will demonstrate why the peaceful approach, in the long term, will provide a better outcome to the security situation.



#### Peshawa A. Muhammed Researcher at Kurdology Centre, Sulaimani University, Kurdistan Region of Iraq

#### **US Perspectives on Kurdish Independence**

Kurdish attempts in the Middle East, especially in Iraq, to gain self-rule represent a potentially serious source of conflict and instability in the region. Since the creation of Iraq in 1921, Iraqi Kurds have struggled to achieve autonomy as their minimum goal and independence as their ultimate objective. And, indeed, Iraqi Kurds have a compelling case for statehood.

Secessionist conflicts constitute a challenge to the American hegemonic position in the Middle East and the Kurdish case remains a central concern for the U.S. However, U.S. policy towards Iraqi Kurdistan has been ambivalent, if not contradictory, in that it has supported de facto autonomy for the Kurds of Iraq, while continually stopping short of supporting their independence.

This highlights how the issue of Kurdish independence is problematic for both the U.S. and the Kurds themselves. This paper sets out to consider the extent to which concern for regional stability determines U.S. attitudes towards the independence of Iraqi Kurdistan. It does so by examining aspects of U.S. policy in relation to Kurdish independence from Iraq, both from a historical and a current perspective. It looks at the nature of Kurdish nationalist ambitions in Iraq and the effectiveness of Kurdish promotion of these ambitions. Further, it considers U.S. policy options for the future of Iraqi Kurdistan, including the possibility of endorsing an independent Kurdish state.

The paper draws a number of conclusions. Importantly, it is clear that U.S. policy towards the Kurds has to be seen in the context of U.S. attitudes towards Iraq more generally. This policy, moreover, has been influenced by weaknesses and divisions in the Kurds' own approach to independence. It would appear that, while a desire for regional stability underpins U.S. policy in the area, specific decisions have been taken by Washington on a pragmatic, case-by-case basis.

Finally, it has revealed that developments since the 2003 U.S. invasion of Iraq have raised concerns about the unity of Iraq while provoking greater expectations among Iraqi Kurds for fully-fledged selfdetermination. The U.S. response to these developments has been to favour a form of federalism which would accommodate Kurdish aspirations rather than full independence.

Keywords: Kurdish Independence, U.S.-Kurdish Relations

#### Seevan Saeed Social Sciences and International Studies, University of Exeter, UK

### From PKK to KCK: Transformation of the Kurdish Struggle in Turkey

There is an important shift with regards to the management of Kurdish social movement in the current time. It is the perception of establishing KCK and the recent shift in Ocalan's perspectives with regards to the concept of the Nation State and turning to the notion of Democratic Autonomous Kurdistan on the one hand; and the democratic republic as well as democratic confederacies on the other hand. I argue that, it is a main aspect of the transformation of this movement from a practical, political, one dimensional movement to a wider and multi dimensional movement. In other words, transformation from PKK to KCK is a transform from political movement to social movement. This is a point that has come on the scene as a result of ideological shift with an influence of the change that has happened in the social and political atmosphere in the region and internationally. The point of discussion here is; how can we engage in the issue of democratization in the Kurdistani society based on the theories of social movements? Castells (2012) argues that Social movement's main task is changing values, producing and reproducing values in society. In other words, social movement can transfer a society from a stage to another. This

paper is trying to analyse the shift of the values since so called 'KCK' system has been established. Particularly, this paper is concentrates on the issues of social, political and cultural diversity parallel to the conceptualizations of 'Democratic Autonomy' in the region. In other words, it is to investigate KCK and Ocalan's Ideas in demonstrating the notion of Democratic Autonomy as an alternative model to the Nation State. The difficulties of analysing Ocalan's discourse are various; the main one is the issue of framing his ideas, let alone the obstacles of implementation. The vague of the range and power of KCK and its hegemony on the Kurdish people and political actors in Turkey is another difficulty that is making the notion of democratic autonomy under the question. Having a sequence of interviews alongside participant observations of the key social and political characters in Kurdish people in Turkey in general and KCK so called 'citizens' in particular, made this paper has clear and fresh visions with regards to the policy and practice of the process of transformation within Kurdish society and its recent freedom struggle.

Key words: Social Movement, Democratic Autonomy, KCK, Transformation.





#### Renad Mansour Department Of Politics And International Relations, University Of Cambridge, UK

### Pragmatic Diplomacy of the Kurdistan Regional Government

From the outset of the 2003 Iraq War and the ensuing nation-building project, the Iragi Kurd leadership made a pragmatic decision to remain an autonomous region within a federal Iraq. This choice was based on three strategic considerations, or rather constraints, of independence. First, geopolitically, all of the Region's neighbours and international supporters objected to the formation of an independent Iraqi Kurdistan state. Second, economically, Iraqi Kurdistan remained a landlocked territory without control over any oil pipelines. Independence meant that Erbil, surrounded by hostile neighbours, had no way of exporting resources (particularly oil). Third, territorially, independence necessitated the Region's claims over the Kirkuk and Mosul territories, areas required for both economic and nationalist reasons. Against this backdrop, the Iraqi Kurd leadership became the champions for a democratic and federal Iraq, using 'independence' rhetorically and strategically as a bargaining tool, when in reality, Erbil now had a stake Iraqi governance. Diplomacy, then, served as a matter of survival. Although they enjoy the habits of statehood, or empirical statehood, including sovereignty over a territory, a population, an armed force, and an autonomous government which conducts independent foreign policy, they lack juridical statehood. In other words, the Kurdistan Region it is not recognized. This means that the Kurdistan Regional Government (KRG) is constantly reasserting itself onto the world stage. In this context, the objective of the article is to assess the primary motivators of the KRG's foreign policy and diplomatic corps. It asks: how does the Iraqi Kurd leadership employ political strategies to establish, in practice, an independent international status, while Baghdad and the international community continue to oppose its formal sovereignty? Rather than waiting for gradual attrition and becoming a 'state-inwaiting', the Iraqi Kurd leadership, well aware of the international lack of appetite for the formation of new states, has acted to address the impediments of independence. Part of this is also ensuring that Kurdish groups in the neighbouring countries, particularly the PYD in Syria and the PKK in Turkey, are not wild cards to stability, but rather, bargaining chips for the negotiating table. Erbil has sought to extend its influence in both territories, and the recently called conference by President Masoud Barzani is an example of this policy. The methodology will include semi-structured interviews with leading political figures tasked with formulating the KRG's foreign policy as well as those diplomats abroad charged with enacting it. The expected result from this paper will be to isolate key determinants of the KRG's foreign policy apparatus, including a memory of trauma based on past injustices, which then leads to a priority for economic and military independence, as well as the importance of having a voice on the international stage, so that history does not repeat itself.

Keywords: Foreign Policy Analysis (FPA), Diplomacy, KRG



#### P01. Shahram Aazam (Canada)

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Subject Matter Expert E-Health Ontario EMR: General Definition

#### **EMRs and its Benefits**

An electronic medical record (EMR):Is a computerized medical record created in an organization that delivers care to places such as a hospital or physician's office. Electronic medical records tend to be a part of a local stand-alone health information system that allows storage retrieval and modification of records. Paper-based records Vs. EMR

Are still by far the most common method of recording patient information for most hospitals and practices in the U.S. The majority of doctors still find their ease of data entry and low cost hard to part with. However, as easy as they are for the doctor to record medical data at the point of care, they require a significant amount of storage space compared to digital records. In the US, most states require physical records be held for a minimum of seven years. The costs of storage media, such as paper and film, per unit of information differ dramatically from that of electronic storage media.

Paper-based records Vs. EMR - When paper records are stored in different locations, collecting them to a single location for review by a health care provider is time consuming and complicated, whereas the process can be simplified with electronic records. This is particularly true in the case of person-centered records, which are impractical to maintain if not electronic (thus difficult to centralize or federate). When paper-based records are required in multiple locations, copying, faxing, and transporting costs are significant compared to duplication

and transfer of digital records Because of these many "after entry" benefits, federal and state governments, insurance companies and other large medical institutions are heavily promoting the adoption of electronic medical records. Congress included a formula of both incentives (up to \$44K per physician under Medicare or up to \$65K over 6 years, under Medicaid) and penalties (i.e. decreased Medicare/ Medicaid reimbursements for covered patients to doctors who fail to use EMR's by 2015) for EMR/EHR adoption versus continued use of paper records as part of the Health Information Technology for Economic and Clinical Health (HITECH) Act, enacted as part of the American Recovery and Reinvestment Act of 2009 One study estimates electronic medical records improve overall efficiency by 6% per year, and the monthly cost of an EMR may (depending on the cost of the EMR) be offset by the cost of only a few "unnecessary" tests or admissions. Paper-based records Vs. EMR

Jerome Groopman disputed these results, publicly asking "How such dramatic claims of cost-saving and quality improvement could be true". However, the increased portability and accessibility of electronic medical records may also increase the ease of use. Handwritten paper medical records can be associated with poor legibility, which can contribute to medical errors. Pre-printed forms, the standardization of abbreviations, and standards for penmanship were encouraged to improve reliability of paper medical records. Paper-based records Vs. EMR.



#### P02. Frzand sh. Abdullah (The Netherlands)

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#### "Komalkari"; A Project for Radicalizing European Kurd Rawti Shakh as the First Trans-National Web-Based Islamic Salafi Jihadi Movement – Through Europe to Kurdistan

Komalkari is a long-term but permanent salafi jihdi electronic project. It attempts toradicalize the European Kurds to be used in jihad arenas that fight for the establishment of an Islamic caliphate. Komalkari consists of two secret Islamic political parties that address Kurdistan and Europe in the same time. What distinguishes this clandestine activity from its precedents is that the leader of the group, Mullah Krekar, completelydepends on Internet to spread the salafi jihadi ideology of it. Rawti Shakh and Rawti Jwameran own internet-based radio and television channels as media outlet, they own a center to spread their ideology and own a website used for recruitment, they also have a religion institution for educating the group's key personnel, and have used Paltalk to establish a secret party through which they organize, collect money, and carry out radicalization and their political projects. founder of Muslim Brotherhood in Egypt . In 1954, (Muhammad Mahmud Sawwaf) the first in charge of Muslim Brotherhood in Iraq visited the Kurdish city of Halabja and gathered the local Mullahs. In 1960, the first Muslim Brotherhood organizational cell was formed in Kurdistan and Sadiq Abdul Aziz was appointed as its leader.

In 1978 the Islamic Association was formed and during the Iraq – Iran war that lasted 8 years (1980 – 1988), with the support of Islamic Republic of Iraq, Maktab Quran was formed in 1985 as the military wing of Islamic Association to fight the Baath regime of Iraq. In 1987, under supervision and support of the Islamic Republic of Iran, Osman Abdul Aziz declared the Islamic Movement of Kurdistan to be the first Islamic Sunni Jihadi movement. Gradually, the Islamic Movement of Kurdistan developed its relationships and established ties with Jihadi.

Key words: Political Islam in Kurdistan, Counter-terrorism, The radicalizing European Kurds



#### P03. Kawa Amin (UK)

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#### **Emergency Mobile Health Clinic for Kurdistan**

Mobile clinic is a method to facilitate delivery of healthcare, medical supplies and essential food to vulnerable people. This is particularly necessary in cases of natural disasters and wars.

Communities that suffered wars and natural disasters are usually endured poor health services, inadequate medical supplies and lack of availability of trained personnel. These issues will always be compounded by mass immigrations and community displacement with higher rate of emotional stress and mismanagement of vulnerable members of the society. The groups most affected by displacement and lack of medical care are older adults with chronic diseases, children because of lack of appropriate nutrition and vaccinations and pregnant women due to inappropriate handling of cases.

Providing support to these areas is not only life saving but also a strategy to build trust between communities and maintaining long-term sustainability through providers' institutional support. This service will also help improving patients' access to healthcare services from remote regions and villages within Kurdistan regional Government. Kurdish communities are suffering the most in the last half centuries

and there are many examples that provide further explanations. For example, in Syrian, it is obvious that major international supports are away from the Kurdistan areas. Perhaps, logistically it is easier for international organisations to approach neighbouring countries such as Turkey and Jordan and in most of the cases aids reach Arab dominated cities. Hence, it is necessary to establish Kurdistan mobile clinics to serve all the people living in the region regardless of their citizenships status, ethnic or religion backgrounds.

Mobile clinics have been established by many working groups; Medicine Without Borders (Medicine Sans Frontier, MSF), US Doctors for Africa and Romanian's SMURD are examples of some aid's providers throughout the world using mobile clinic strategy.

Vision and objectives; KRG is regarded as the nucleus of Kurdistan and even as Mesopotamia as whole. This impression has evolved even more with the development of proactive initiatives to provide humanitarian aid. This also draws attention to major international organisations that are involved in any aspects of healthcare or investments in economic health.

Key words; Emergency mobile clinic



#### P04. Pshtiwan Sadiq (Kurdistan Region)

Secession of Kurdistan Region According to the Right of Self Determination diakosiako@hotmail.com

### Secession of the Kurdistan Region According to the Right of Self Determination

This thesis discusses one of the important rights of nations, the right of Self Determination according to the basis of international law, by focusing on the case of Kurdistan.

Nowadays, we are witnessing big changes and developments in different levels of life, because of technological revolution especially in the information and social networking field, and the new era of globalization. Due to what is mentioned above can be discussed that those changes had and still have direct impact on the development of International Law in favorer of nations and people.

After the end of the Cold War, the new changes in the international level appeared obviously and according to that the shape and the status of many states changed rapidly, and many nations got independence according to the Right of Self Determination principles, and those states declared their statehood through secession. In this era, the traditional understanding of the classical nation state sovereignty, and the complete sovereignty of a particular state within its borders became unacceptable according to the norms of the post-cold war era, and human rights principles became the most acceptable model for mankind.

Kurds are considered as the largest nation without a state in the Middle East and the World. For more than a century many attempts and plans were implemented in order to diminish, suppress, even to reject the national identity of Kurdish nation through ethnic cleansing, genocide, cultural changing, famine and bloody conflicts. The Kurdish people suffered from horrible crimes and violations, only because they are demanding and asking for basic rights of a free and peaceful life according to the principles of self-determination.

Kurdistan Region of Iraq (South of Kurdistan) witnessed a large scale of developments that transformed Kurdistan region toward another stage of development and stability in contrary of the rest of Iraq, and also the disturbed and violent Iraq became an obstacle in the path of Kurdistan region development, and also a threat to destroy all the achievements made by the Kurdish people since 1991. In this research we will discuss the legal and historic dimensions of the Iraqi Kurdistan region right of secession from Iraq based on the right of Self Determination, by discussing the : theoretical definition of secession, shedding the light on the historic issues of the Kurdish nation, the legal basis of Kurdistan region people right to secession and selfdetermination based on international law, discussing the positive and negative factors of Kurdistan secession, and finally the methods and procedures of Kurdistan region secession and legal consequences of such act.

This research will try to answer two main questions why Kurdistan people want to separate?, and how to take this action according to the principles of International law that gives nations all over the world the right of self-determination.

This study concludes that Kurdistan region of Iraq has all the elements and capabilities of creating an independent state , and also Kurdistan people has all the historic and legal justifications for secession from Iraq according to the right of self-determination, with considering that this act of secession will have several legal consequences.

This research is discussing the unique case of the largest nation without a state in the twenty first century, the case of Kurdistan.



#### P05. Mariwan Baker and Claus F. Behrens (Denmark)

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#### Comparison of 3-D Ultrasound Imaging and Kilo-Voltage Imaging for Determining Daily Variations in Position of Prostate during Radiotherapy

#### Background

The course of radiotherapy for prostate cancer patients can be up to 38 fractions. Daily set-up uncertainties limit optimization of the radiation treatment delivery. Thus the treatment outcome is crucially related to reproducibility of the prostate position on a daily basis. The purpose of this study is to quantify and evaluate the daily changes in prostate position caused by day-to-day set-up conditions by comparing a novel 3-D ultrasound (US) imaging system to a routine clinical used kilo-voltage (kV) imaging system.

#### Materials and Methods

Four patients with localized prostate cancer underwent daily patient setup verification imaging in the treatment room, using kV Varian® On-Board Imager® (OBI). The patients, with implanted radio-opaque markers in their prostate, received radiotherapy at Herlev hospital according to their tailored treatment plan. Daily positional shift, obtained through matching the implanted markers from OBI images to the reference images from the treatment plan, was applied and recorded prior to the treatment delivery. Immediately after the treatment delivery the patients were US-scanned. The trans-abdominal US scans were performed using a 3-D US system (Clarity® Model 310C00, Elekta, Montreal, Canada). The US scans were acquired in four subsequent fractions. The acquired US image of prostate was matched to the reference US image from the CT room, and any positional shift was recorded. Finally, the prostate shifts based on US were compared to the corresponded shifts obtained by OBI for the three orthogonal directions; left (+)-right (LR), anterior (+)-posterior (AP), and inferior (+)-superior (IS), respectively.

Results and discussions The mean of the positional shifts  $\pm$ 1SD of four patients (16 US scans and 16 OBI imaging) were (in mm); LR: (US: -0.5  $\pm$  6.6; OBI: 1.8  $\pm$  3.2), AP: (US: 0.8  $\pm$  6.1; OBI: 0.9  $\pm$  1.5), and IS: (US: 1.3  $\pm$  7.3; OBI: 0.7  $\pm$  2.8), respectively. Disagreements in the positional shifts comparing US to OBI are observed in all three dimensions. The dominant shift was in IS-direction while using US. The largest deviation between US to OBI was found to be 20.8 mm in LR for patient 1 in fraction 3.

Conclusion This study suggests that the precision of OBI image guide system is superior to the novel US imaging system in localizing prostate position on a daily basis. Results obtained in this comparison study are in good agreement with published studies.

Keywords: Radiotherapy, kV OBI, 3-D US.

#### P06. Delovan F. Barwari (USA)

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#### A Two-State Solution to End the Ongoing Violence and Political Crisis in Iraq

Since its creation in 1921, Iraq has experienced numerous revolts by the Shias and Kurds, as their regions were forcefully annexed into the new state and Sunni rule was imposed upon them, resulting in the loss of millions of lives, as the Iraqi government brutally responded to crush the uprisings. In spite of the transition from decades of dictatorial rule to a plural democratic political system since 2003, Iraq continues to experience ongoing violence and political crisis. Thereby, the most viable option for resolving over nine decades of conflict is a two-state partition. This will consist of an independent Kurdish state in the North and multiple Shia and Sunni federal regions in the Center and South of Iraq.



#### P07. Ala Berzinji (Sweden)

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#### E-Government Solution for Iraqi Kurdistan Region

Nowadays Kurdistan region keeps growing very fast in all aspects and major improvements have happened in this region. It's essential for the growth of this region to develop in the right way and adapt to the needs of this region. Although this region is developing fast but it's not free from weak points; but smart nations can detect those points and trying to find suitable solutions for them. Using the traditional system, paper based system, for dealing with paper works at the organizations and directorates which is not capable of dealing with all the citizens' requests especially with the constant increase in number of population. Those reasons have lead to more routine, unprofessional staff, masked unemployment and information leak. Meanwhile providing electronic solutions and establishing e-government in the region will solve most of those problems. This study is revealing the tool which has been built to solve the problems mentioned above. The tool is a strong, single piece, software in terms of security, it performs all the tasks electronically and its web based which can connect all the organizations and directorates in the region. This tool helps speeding up the processing times of citizens requests.

After running this soft ware at one of the governmental organisations, the differences between processing time and quality of citizens enquires respond before and after running the soft ware were significant.

Key words: E-government, Kurdistan region

#### P8. Deborah M.J. (Kurdistan Region)

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#### The Perspective Roles of Civil Society, Private Sector and State in Development of the Federal Region of Kurdistan (FRK) as an Emerging De-Facto State Within the Republic of Iraq, in the 21st Century and Beyond

The respective roles of civil society, private sector and state in the development of the federal region of Kurdistan (frk) as an emerging de-facto state within the republic of Iraq, in the 21st century and beyond'.

This paper addresses the respective roles that Civil Society, the Private Sector and the State play in the development of the Federal Region of Kurdistan (FRK) as an emerging de facto state within the Republic of Iraq, in the twenty first century and beyond. Ten years on post-Saddam, FRK is showing remarkable outward signs of prosperity and yet there are concerning societal aspects in those advancements. Destruction of the social fabric of traditional communities which have been rapidly subjected to urbanization in developmental changes, is a worrying trend despite His Excellency President Barzani proclaiming 'one of the primary purposes of our Government is to ensure the social fabric of our communities grows alongside the economy'. Developmental 'change' to a movement of people is not always 'good change', it has to be managed effectively from within and without and fully embrace all relevant change 'agents'. The roles of Civil Society Organisations (CSO's), the Private Sector and the State, should run concurrently and cohesively and all be suitably empowered. Thus far, CSO's have been largely ineffective and invisible, not through choice or intention. The 'state' in FRK's case, is predominantly represented by one single entity; Kurdistan Regional Government (KRG), albeit a bi-lateral power-sharing agreement with Irag's central Government in Baghdad in an effort to maintain peaceable relations and economy sharing. Political, religious, sociological and technological factors all play their significant parts in the Region's development and in themselves have their own inherent tensions and challenges for FRK. Infrastructure problems, communications, safety and security and closed minority groups fighting for their own sanctuary, independence and identity, often conflict with Kurdistan's cohesive vision and policy-making to be one whole and independent entity. Stewardship and rights to intervention in FRK's development has meant a delicate path to successfully integrate state actors, private sector and people-centred development and thus far FRK is a long way off achieving this and will depend on the maturity and vision of the Region's Leadership.

Key words: Democracy Good governance Civil Society-Private Sector-State- Conceptual framework Development



#### P09. Baadal H. Elias, Sayran A. Abdulgafar and Shilan I. Abo (Kurdistan Region)

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#### The Effect of Noise Pollution on Arterial Blood Pressure and Heart Pulse Rate of Dentists in their Dental Offices in Duhok City- Iraq

The effect of noise pollution on arterial blood pressure and heart pulse rate of dentists in their dental offices in duhok city- iraq

Noise pollution is one of the most important problems of the contemporary world. The aim of the present study was to assess the noise pollution and its effects on the systolic, diastolic blood pressure, and heart pulse rate for 12 dentists in their clinics chosen randomly in Duhok city, in Kurdistan region in North of Iraq. The mean age of the samples was 40 year, and the mean duration of their service was 6.5 years. The noise levels measured during operational periods in the

chosen dental offices were found to be between 65 and 84.3 decibel (dB). The arterial blood pressure (systolic, diastolic) and heart pulse rate of doctors were measured before and after exposure to noise for four hours. Pearson Correlation Coefficient (R) and P-values for all measured variables were calculated. R and P-values for systolic blood pressure were -0.009, 0.977, while for diastolic were 0.104, 0.749, and finally for heart pulse rate were 0.454, 0.139 respectively. This study shows that after four hours of work, there was no significant relation between the mean values for blood pressure (systolic, diastolic) and heart pulse rate and the sound pressure levels.

The average sound pressure level measured for dentists in their offices was 72.92 dB. This result indicated that the sound pressure level for all samples was lower than the limited threshold (85 dBA) that OSHA (Occupational Safety & Health Administration) sets as legal limits on noise exposure in the workplace.(Abstract)

#### P10. S. I. Essaa and M. H. Kakaeeb (Malaysia)

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#### A New Secure Framework for Online Banking Systems

Passwords are widely used when accessing computers, networks, accounts and websites. A big drawback of password is called password problem which is not being resist against several password attacks such as phishing, dictionary attack, eavesdropping, and shoulder-surfing. Other than being secure against these attacks passwords should be easy to remember. In this paper, we discuss how to prevent users' passwords from being stolen by adversaries. We have introduced a secure framework for online

banking authentication system, which is secure in public area and invulnerable to the common attacks and users can achieve the authentication process simply by selecting the appropriate mode according to the environment status (Safe or Unsafe). The analysis of the proposed system, it shows that the user has multi-choice unlike previous approaches (single choice) to access the system.

Keywords; Authentication Scheme; Online Banking Transactions; Password Attacks; Security.



#### P11. Saman Esmaeilnejad (Kurdistan Region, Iran)

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#### Application of Valproic Acid as a Small Molecule Effective on Pluripotency Induction to Enhance Repair Capacity in Kainic Acid Induced Hippocampal Degeneration

Application of valproic acid as a small molecule effective on pluripotency induction to enhance repair capacity in kainic acid induced hippocampal degeneration

Introduction: Some agents enhance neural progenitor cells (NPCs) proliferation and can be used to enhance neurogenesis. Valproic Acid (VPA) is one of the small molecules that enhance NPCs proliferation through epigenetic modifications. VPA (2-propylpentanoic acid) is a well-known anticonvulsant and mood stabilizer. There are evidences that VPA has had beneficial effects in multiple animal models of neurodegenerative disorders. In recent studies there are evidences that VPA increases reprogramming and induces pluripotent stem cell (iPSC) production. In this study, we tried to examine VPA to enhance hippocampal neurogenesis following Kainic Acid (KA) induced neurodegeneration.

Methods: To achieve hippocampal neurodegeneration, KA was administrated intranasally to female C57bl/6 mice. VPA (300 mg/kg/ day) was gavaged twice a day for 7 days before KA administration. Animals working memory were evaluated before, 5days and 10 days after KA administration. 5 days after KA administration, Brain samples were taken from mice. For immunohistochemical study, antibody against PSA-NCAM, as a marker of immature neurons, was used. The histological assessment of neurodegeneration was done by cell counting of NissI-stained sections. Expression of neural stem cell marker, Nestin, and neural progenitor cell markers, Sox1 and Pax6, was investigated using Real-time PCR. Y maze Spontaneous Alteration test was used for evaluation of behavioral symptoms and hippocampal repair.

Results: VPA pretreatment increased memory performance in Y maze Spontaneous Alteration test on day 5, post-KA administration. Number of cells in CA3 region of mice hippocampi, pre-treating with VPA was significantly more than the group without pre-treatment. Immunohistochemical studies showed presence of PSA-NCAM+ cells in the lesion site in animals pre-treated with VPA. Furthermore, expression of Nestin as neural stem cells (NSCs) and NPCs marker was increased in animals pre-treated with VPA.

Conclusion: Application of VPA could improve memory in KA induced model of neurodegeneration. VPA also increased neurogenesis in the CA3 region of hippocampus. It seems VPA has exerted its effects through increasing the amount of NSCs and NPCs and also their differentiation to adult neurons

Key Words: Neurogenesis; Neurodegeneration



#### P12. Tara Fatehi (Australia)

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#### Women's Health: In Kurdish Societies and Kurdistan

The Doaa Network Against Violence reported an alarming figure of more than 12,000 women who had died in honor-based killings between 1991 and 2007 in South Kurdistan. It was only in 2008, four years ago, that the KRG passed a law to officially recognise honor-killings as murder. In 2010 the German NGO Wadi released a report, based on interviews with 1,700 women, which revealed that a staggering 72.7 percent of women in the region's two biggest provinces of Hewler and Slemani were victims of female genital mutilation, with the rate rising to almost 100 percent in some areas. An article published in The Guardian in 2007 about the suicide of young women revealed that "Rape is committed habitually" throughout Iraq, including South Kurdistan. The article highlights that victims of rape then turn to suicide because of the fear of people finding out and the hopelessness they feel when they are unable to speak to anyone about such problems.

Another report shows that within 5 years, from 2001 to 2005, 930

cases of suicide attempts were recorded in Slemani alone. Within 4 years, from 2003 to 2006 a staggering 2,390 suicide attempts were recorded in Hewler. The numbers show a clear increase over the years in both provinces sampled in the report by Hanna & Ahmad (2009). Out of the samples taken in Hewler, Slemani and Duhok, the three largest provinces in South Kurdistan, 76.3% of suicide attempts recorded were female. About one fifth of suicide attempts recorded ended in death.

I believe that the greatest cause of this pandemic plaguing our women and children is due to the swift social changes in society in Kurdistan. More burdens are put on females compared to that of their male's counterparts who are enjoying their freedom with no social blame. More worrying than anything is that this type of mentality and lack of education towards sex creates a culture of honour killings, genital mutilation, and rape. Both in Kurdistan and Kurdish societies the importance of educating our women and society in general about women's health in order to limit and ultimately eliminate such violence against women needs to be the pivotal point of women's health aims.



#### P13. Boyan Hadzhiev (Bulgaria)

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#### New Media and the Development of Modern Society

Modern protests and "global awakening" of civil society is one of the most analyzed topics nowadays. Revealing of the factors contributing to the wave of mass civil protests in the world is the basis of the understanding the nature of modern processes. This paper will discuss the relationship between the role of new media technologies and the specific features of the Internet with the main objectives of the modern civil society.

The most important features of the new media are interactivity, asynchronous communication, narrowcasting, and multimedia. These special characteristics are the basis of the changing context and they create new opportunities for civilian control and the development of civil society as a whole.

The technological revolution and the conversion of the Internet to an accessible source of information, led to changes in the information environment and society as a whole. The characteristic features of the traditional media as main organizers of the public agenda and filters of information, are now facing the competition of the new media and the free access to the alternative (than that prevailing in the mainstream media) information.

Through the functions and advantages of the new media, opposition

groups and society as a whole can realize some of its main objectives – popularization of reasons and causes, winning support and supporters, spreading information about events, ideas, policies, coordination, organization, etc. The traditional media no longer control information flow as before when the media environment was characterized by limited access. This in turn provides access and opportunities for various actors to use new technologies for the realization of their own objectives related to political participation and creation and dissemination of information and messages. This paper will present a theoretical model of the relationship between specific features of the new media and the main objectives of the civil society. How these connections are carried out and what are the results. The methods, which will be used, are comparative analysis, analysis of secondary data and case studies.

No matter whether it comes to an American, Bulgarian or Kurdish society there are trends of the increasing political role of the ordinary citizen protester or so called "man from the street." The explanation and understanding of these processes are the basis for the disclosure of important dimensions and aspects of socio-political development of the modern state and society.

Key Words: civil society, new media, Internet, contemporary political protests



#### **Posters**

#### P14. Lena Insulander and Maria Köhler (Sweden)

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#### Gaps in Professional Competences in Kurdistan Business Including Field Study in Northern Iraq April 2011 and August 2012

Northern Iraq is a region in swift development giving local and international private companies and organizations the opportunity to engage in new business ventures. However, this is not without obstacles. This study identifies obstacles for the development of business in Kurdistan, categorizes the reasons behind and proposes measures to cope with problems. Specific focus is on the availability of professional competences and skills in Kurdistan. The study confirms that the lack of such competences and skills is a major obstacle.

Through a field study, personally carried out by the authors, with focus on human resources, professional skills and competence needs in private business, the present Situation was investigated as expressed by concerned parties active in Northern Iraq. Approximately 40 interviews were performed with managers in executive positions in both local and international companies and organizations active in Kurdistan. Various business sectors were covered and almost all meetings were held in Erbil An up-date of the study was made one year later with assistance from a local partner, WHA Financial Services, present in Erbil. This update focused on possible changes since 2011.

The field study established that general gaps were expressed for all professional levels in private sectors concerning:

• theoretical and practical professional knowledge and skills

• knowledge and experience in using adequate modern working methods, applying specifically to leadership, teamwork and empowerment

The comprehensive results from the field study have been analyzed together with other relevant background information.

In conclusion, a number of actions are recommended in order to diminish the gaps in professional competences. They concern vocational training, modernization of general education, recruitment, remuneration and payments, repatriation and certain social norms. System gaps regarding retirement benefits, insurances, and availability of statistics are also commented.

#### P15. Havjin Jacob (Norway)

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#### The Importance of Basic Science for Cancer Treatment

Cancer is a common diseases and the leading cause of death worldwide. Since the 1970s is survival two times longer. This can be explained by better targeted drugs and more advanced treatments. However, despite overall therapeutic improvements, there is still high mortality, which accounts 7.6 million deaths worldwide. A study from 2007 to 2009 shows high increase in cancer rates in Kurdistan region in Iraq. Breast cancer is the most frequent cancer in women and haematological malignancy in men.

Our body is formed of about 100 trillion cells. They all follow a carefully controlled path of cell growth, division and cell death. But if these processes are damaged, cancer can develop. Cancer stem cells are a new interesting field of research in molecular biology. Otherwise, stem cells are mother cells that can divide and differentiate into different specialized cell types. They can also self-renew. Recent research shows that stem cells and cancer stem cells are two different entities with many similarities. These cancer stem cells can self-renew and make tumour more cancerous.

Researchers have found that cancer stem cells concepts have important implications for cancer treatment. Targeting stem cells could be an effective therapeutic approach for cancer therapy. To learn more about cancer stem cells and determine the types of therapy, scientists need to study cancer stem cells, molecular markers, and the way they regulate the pathways. More effective therapies will be achieved if they can target cancer stem cells that are responsible for growth and spread of cancer.

Discovering new cancer stem cell markers and understanding the molecular pathways where they play a part, are crucial for applying stem cells as targeted therapy.



#### P16. Jamil Jalal (Denmark)

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### Effect of Climate on the Use of Olive Trees to Develop Green Area in Sulaimania

Effect of Climate on Utilizing of Olive for Developing Green Area in Sulaimania Governorate

Olive is one of the native trees of the Middle East and Iraqi-Kurdistan region which can survive severe ecosystems including hot and cold climates, sandy and rocky soils and even soils with 40-60% calcite content. The growing area in Iraqi-Kurdistan is limited to around 250 Ha, while several countries such as Spain and Italy each grow more than 2 million Ha of olive, which play an important role in their economies.

Data on the growing area of olive were collected through direct visitation to the areas where they are grown in the Sulaimania governorate, and through the collection of data from agricultural directory of Sulaimania.

Results from collected data showed that growing of olives in the Sulaimania governorate is by means of drip irrigation system, which is entirely dependent on supply of water from ground water. In contrast, 90% of the world's olive is dependent on water from precipitation. Moreover, olive can survive low rainfall of 300mm and can give satisfactory yields with rainfall of 500 mm without irrigation.

In general the total rainfall in the Sulaimania governorate rarely drops below 300 mm, during the years of 1941to 2013. This makes olive among the most suitable and economic trees for utilizing in such sandy and rocky soils of the Sulaimania governorate, which constitutes 20% of the total area to the vegetation area. Therefore, Olive tree has a great role in the re-vegetation process of the aforementioned ecosystem. Moreover olive should be included in any program of renewing the Kurdistan region forest. Olive also plays a great role in developing tourism in the region. In conclusion, agricultural lands should not be allocated for olive tree growing; instead, bare lands should be used.

The majority of olive tree fields were planted in the best agriculture land, which should be allocated for strategic field crops like wheat, rice, and maize. Moreover, the aforementioned lands are rich with montmorillonite, which swells when it is exposed to precipitation and shrinks when it is dry. Thus resulting in deep cracks in the soil which causes the breaking down of the roots and weakening of trees



#### P17. Jamil Jalal (Kurdistan Region)

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Utilization of Wild Rosa canina for development of vegetation area and water harvesting in Sulaimania gardens

#### Utilization of Wild Rosa Canina for Development of Vegetation Area and Water Harvesting in Sulaimania Gardens

#### Introduction and definitions

Rosa canina (dog rose) is a climbing wild rose species native to Europe, northwest Africa and western Asia (Middle East). It has a good and healthy root system and resistant to extended hot dry summers, requires much less water than ordinary roses. These characteristics make it suitable to graft other varieties of rosé family on it. Garden roses are predominantly hybrid roses that are grown as ornamental plants in private or public gardens. They are one of the most popular and widely cultivated groups of flowering plants, especially in temperate climates. Numerous cultivars have been produced, especially over the last two centuries, though roses have been known in the garden for millennia beforehand. While most garden roses are grown for their flowers, some are also valued for other reasons, such as having ornamental fruit, providing ground cover, or for hedging. Vegetation area is one of the environmental measurements of the degree of developed countries. It plays a great role in purifying pollutants from the town atmosphere in addition to modifying the climate and attracting the tourism.

#### Problems/challenges

The Middle East is heading for rapid desertification because of drought , rainfall shortage, endless permanent wars, population explosion, rapid unplanned mass migration of farmers to towns and large cities with total dependence on winter rainfall. Soon you will see huge ugly chantry towns with multimillion populations with no sanitation and green areas.

Numerous water resources are drying up and dying one after the other because of manmade disasters and repeated droughts.

Evidence: now we have 300 days of sand storms /sand raining in a year in Erbil and Sulaimania

Some Remedies: Grafting Garden roses on wild roses to save water and irrigation costs and improve your environment.

Water deficiency in summer is among the most important factors that retard development of vegetation area within and out of the towns of Kurdistan. Moreover Rainfall shortage starts in from around 15th may to the end of October even when you have a good rainy year, pending Gods will, that mean around 5 months with high temperature above 40 c and with high evapotranspiration between 6- 9 mm/ day which increase high water requirements excessively . The vegetation area in most of the developed countries is more than 20% of the towns whereas it is in Kurdistan towns ranging from 4-5 percent. There are several ways for providing irrigations water for expanding vegetation cover in the gardens of the cities such as bringing water from ever diminishing rivers, dams, and through deep wells but it costs a lot of money and causes weakness or dry the existing vegetation cover in the surrounding areas due to declining ground water level and subsequently drying the root zone of plants.

In this study biological water saving achieved by grafting several rose varieties on existing canina branches, the resulting new beautiful plants can be used in the town / and private gardens, they initially need one or 2 irrigations per month in the summer months .



#### P18. M. H. Kakaeea and S. I. Essa (Malysia)

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#### New Coding Technique for Optical Communications Systems

In this paper a new family of novel spreading sequences, called a Multi-Service (MS) code have been proposed for Spectral Amplitude Coding (SAC)-Optical Code Division Multiple Access (OCDMA) systems. The performance of the proposed code is demonstrated using mathematical analysis. The new proposed code is compared with other codes like RD and KS which use the same technique. The results characterizing the Bit-Error-Rate(BER) with respect to the total number of active users, show that the new proposed technique offers a significant improved performance over other types of codes due to low crosscorrelation () between code sequences. where it can supports up to 90 users simultaneously, choosing code weight of 5 when the bit-rate is 622 Mbps at BER of 10-9. Furthermore, the results show that with lower value of basic users can support larger number of subscribers as well as better performance in terms of acceptable BER.

Keywords- Fiber Optics Communications; Optical Code Division Multiple Access (OCDMA); Spectral Amplitude Coding (SAC); Multiple Access Interference (MAI).

#### P19. Hero Karimi (UK)

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#### **Beyond Diaspora – What Now?**

This paper analyses socially constructed expectations of self and others on the basis of Kurdishness. To understand the factors of identity formation, among intersectional - and second generation Kurds' is of the utmost importance in today's multifaceted society. While former generations moved from something, and had that in the back of their minds when constructing ways of dealing with migration and living in exile, younger generations did not have this safety. It was rather musicians like Sivan Perwer, and human right activists like Leyla Zana that gave them a tie with their homeland, and thus the emotional substance one finds among senior generations. In developing a national identity from afar younger generations now see themselves as 21st century Peshmerges - bringing a new level of understanding to the European diaspora, and highlighting the extent to how identity construction differ among generations of Kurds. By exploring 'Kurdishness' from 'new' Kurds one discovers the mindset of the entrepreneurs of today's diaspora, which are the so-called intersectional and second generation Kurds.

When growing up as part of the Kurdish diaspora in Europe, one exceeds a certain time line as a youth, a rather invisible one, where one goes from being a foreigner to just being. The times of displacement and identity crisis are replaced with empowerment and succeeding. One can even question if the sentiments of identity crisis ever belonged to these young Kurds, or if it was merely just another thing they inherited from their parents, in the same manner as, for example, culture. With a generational continuation of reconstructing a homeland, though with different sentiments than before, these Kurds grow up to be long-distance nationalists in a new era. Diaspora transnationalism substitutes prior ideas like a nonstop battle of homeland versus hostland, conflicts and migrant related feelings, and what their parents have felt before; the denial of ethnic existence.

Our understanding of being Kurdish is 'fed' to us by elders, family and what generations before have defined it as, which is exactly why we need a youth version of what it is to be Kurdish, to feel Kurdish, to produce Kurdishness. The Kurdishness from previous generations defines their understanding of Kurdishness based on their experiences from homeland, migration and exile, while the youth do not necessarily share this background.

'Beyond diaspora – what now' reflects on being a young Kurd in a diaspora setting, without being tied down to a stereotypical notion of being another, a refugee, a migrant, without being displaced. *Key words: Diaspora, Youth, Ethnicity, Identity, Kurdishness, Migration.* 



#### P20. Sait Keskin (UK)

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#### Democratic Society and Radical Democracy or the Nation-State and Liberal Democracy in the Process of Nation Building

The paradigm of democratic society and radical democracy as an alternative to the nation-state and liberal democracy will be analysed in the contexts of Southern and Western Kurdistan, and compared in the light of recent developments in the Middle East.

The First World War's result was the end of empires and a new era of artificial nation-states in the Middle East. The nation-states were not invented and constructed on the base of natural homogeneity of the people, but on the base of victorious powers' geo-strategic, geo-political and economic interests. The nation-state boundaries became a maze of complex religious, ethnic and national conflicts mainly in the Middle East region. Social, Cultural, Political, economic and technological developments awakened the people to stand for their universal national and political rights. One of these complex conflicts is the case of Kurdistan among "four (Turkey, Iran, Iraq, and Syria) and plus two (the Red Kurdistan between Armenia and Azerbaijan)" nation states.

Throughout twentieth century the people of Kurdistan struggled for freedom and independence, however, most of the uprisings and rebellions were crushed brutally with the support of the both super powers of the time - the Liberal and Socialist camps. The four nation-states were always in alliance when the subject of the table was Kurdistan. But today the international and regional situation is changed Freedom and liberation is on the horizon for Kurdistani people. Southern Kurdistan is moving towards independence, Western Kurdistan is securing its de facto status, Northern Kurdistan is in peace negotiations and Eastern Kurdistan is in the silence of just before tsunami and most importantly the Kurdistan National Congress is took place in Hewler. At the beginning of the second decade of twenty first century, what kind of political system and institutions do the Kurdistani actors want to establish? The four nation-states have not brought any fraternity or prosperity to the people of the region, should the Kurdistani people follow their path, or to look at for radical alternative solutions? Can the proposed Radical Democratic solution by the KCK be a viable solution while it has not been experimented or to follow the KRG's liberal democratic political system? Will it be possible for the implementation of Democratic autonomy in Western Kurdistan and the experiment? What are the chances of the liberal democratic experiment in Southern Kurdistan? Could it be possible to end up with implementing a socio-economic and socio-political policy for an egalitarian society, which the people are extremely looking forward to see?

Key Words: Nation-State, Liberal democracy, Democratic Society and Radical Democracy



#### P21. Jaafar H. Khidir (Kurdistan Region)

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Scientific Research and its Importance with special References to Kurdistan Region-Iraq

# Scientific Research and Its Importance with Special References to the Kurdistan Region-Iraq

This study, which deals with the role and importance of scientific research with special reference to Kurdistan Region-Iraq, aims to enhance the subject with new information and propose some appropriate mechanisms to activate scientific research in the Region that undergoes critical process of development. As a "Descriptive Analytical Research", the study depends on related "Qualitative Information" obtained through means of "Observation" as well as available data by the World Bank and United Nations Statistics Division. In this context, the study attempts to address the following questions:

1. What is the importance of scientific research activity; and how does the role of this activity affect various fields of life in different societies, including Kurdistan Region?

2. Why does not scientific research activity in developing countries have the same role and importance as in developed countries and

how can this activity be strengthen in Kurdistan Region to play its important role in various areas of life, including political life?

It seems from this study that the importance of scientific research activity continues to grow in the world, especially in developed countries that benefit from advantages and objectives of this activity by following a successful scientific tradition, allocating substantial amounts of their income for this purpose. Meanwhile, developed countries and its scientific research activity have a sound relating infrastructure, including the employment of a large number of professional researchers. In contrast, the situation is negatively different in developing countries, including Kurdistan Region. This different situation causes not only to breakdown the major roles of this activity, but also to deprive developing countries in general and Kurdistan Region in particular from advantages and purposes of scientific research. Therefore, this study provides appropriate proposals to activate and strengthen the scientific research to play its important role.

#### P22. Kristiina Koivunen (Finland)

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#### **Ecological Genocide in Kirkuk**

Kirkuk has been target for decades of genocidal acts: the Ba'athist regime of Iraq ordered deportation of the Kurds and destruction of buildings and farmlands.

Among the literature in English language there is very little information about the ecological situation in Kirkuk, and no mention about destruction of the environment as a genocide method. The topic is not only an environmental issue, it has several levels: Kurdish identity is closely connected to the nature. The destruction of the environment changes the character of Kirkuk: it lies on the edge of desert and there is danger that the area will turn into a desert forever - deserts are Arab-style environment, not Kurdish-style. Changes in nature and loss of contacts to it change also the mentality and identity of the Kirkuk residents, who are Kurds.

The goal of my research is to describe the destruction of the environment as part of the Ba'athist Arabization program which was

run in Kirkuk from early 1970s to 2003. Implementation of the Article 140 of referendum in the Disputed Territories has been postponed to an unknown future and the destruction of the environment still continues. The target is of the preliminary research is to prepare a larger research plan.

There are two levels in the analysis about the effects of the Arabization program in the environmental context: how the Kirkuk nature has changed from the early 1970s until now, and how these changes have affected Kirkuk's Kurdish character and the identity of the residents. The main survey method will be data collection from official sources about the past and present situation and interviews of elder people who remember the past. In the World Kurdish Congress in Stockholm I will present an overall view of the situation. The sources of information are interviews which I have done during thirty visits to Kirkuk during 2008-2012 as well as my pictures from there.

Keywords: Kirkuk, genocide, environment



#### P23. Shahnaz Koji (Canada)

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#### The Implementation of an Educational and Care System for those Suffering from Dementia in Kurdistan Dementia Society of Kurdistan

Dementia is a syndrome that affects cognition, memory, behaviour and the ability to perform everyday activities, especially the ability to care for oneself. The disease is chronic and progressive in nature, with symptoms of deterioration mild in early stages, and becoming significantly worse in later stages. Dementia describes a set of symptoms that can be caused by numerous degenerative brain diseases including Alzheimer's Disease, vascular dementia and fronto-temporal dementia, which generally affect an older population (those aged 55+). The number of people living with dementia worldwide is currently estimated at 35.6 million. This number will double by 2030 and more than triple by 2050, according to the World Health Organization (WHO).

Though there is not yet a cure for the diseases that cause dementia, there are many forms of drug and cognitive therapies and interventions that significantly reduce the progression of the disease and improve the quality of life for the sufferer, as well as their family members and caregivers. However, early diagnosis and treatment are critical for these therapies to be most effective. The Kurdistan region currently lacks the resources necessary to educate healthcare professionals, those suffering with dementia, as well as their caregivers, on proper diagnosis, treatment interventions and care options. Additionally, an educational system needs to be implemented to raise awareness of the warning signs of dementia. This will be essential in ensuring that early diagnosis and treatment is attained. In 2012 The World Health Organization released a report titled Dementia: A Public Health Priority. This report highlighted the dire need for governments around the world to take action to alleviate the economic and social stress of dementia. In order to provide the care and educational services described, it is proposed that a Dementia Society of Kurdistan be established. The goal of the society will be to develop and implement strategies that improve the personal and social consequences of dementia. Furthermore, the society will promote research for a cure, as well as research initiatives that support innovative drug and cognitive interventions.

Keywords: Dementia, Alzheimer's Disease, Healthcare

#### P24. Aram A. Mustafa (Australia)

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#### Mobile Online Booking System For Medical Practices

One of the biggest problems faced by patients seeking appointments from healthcare providers is the extensive wait and the inconvenient methods for booking appointments. The healthcare providers are also plagued with doing tasks that do not add value to their service, such as ringing patients to confirm appointments and employing a receptionist to handle many tasks that should be automated.

There have been several firms in the medical industry that have addressed this issue and have designed appointment booking systems online and through smartphone applications but they also charge expensive fees for an elementary service. Through the emergence of new technologies like the widespread adoption of mobile applications and NFC Near Field Communications technologies, it presents many opportunities for this industry to leverage this technology with their services.

This report will present research into a system where it aims to overcome the existing limitations of systems on the markets whilst aiming to incorporate new technologies to leverage existing standards to establish an ecosystem that will appeal to customers to engage with.

Keyword: Health, Medicine, Patient, Pharmacy.



#### P25. Karim Najar (Sweden)

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## The Greater the Plasticity of the Brain, the Easier It Becomes to Communicate and Achieve Well-Being

#### Hypotheses:

1-Communication and Integration is the corner stone of healthy life and well-being.

2-Communication needs shared values and meanings among the Heterogeneous individuals in any context while the absence of these values lead to more isolation and stress.

Our Brain is a product of our past experiences and adaptation .Neuroscience have verified the fact , that through mechanism of brain plasticity we can formulate the structure of our brains and react accordingly to every single stimuli in positive or negative way. Homogeneous people, with similar ethnicities and cultural backgrounds , Who went through the same experiences ,are probably more alike in the architecture of the synapses of their brain due to Brain plasticity . Since these Homogeneous people share the same values and meanings in their life, make their communication and integration easier in compare to heterogeneous peoples ,who have divers values and meanings and have different architecture in their synapses and brain .

Heterogeneous individuals in any context cannot share the past experiences of each others to share the same values and feel the well being state thought better communication and easier integration .This obstacle to share the past experiences can be substitute by sharing new values and meanings.

The purpose of this substitution is to reconstruct their brain through

Brain plasticity to be more alike thus make their communication , integration possible and make them living in the well being state . Well being meant to have three pillars physical,mental and social. which lead to an optimal state of health as it has stated by the (World Health Organization (WHO)) .

To verify the above hypotheses interview with the Neurologists and Broad research has been conducted in the literatures of Neuroscience, Psychiatry and Neurobehavioral Sciences, Social , Psychosocial Sciences and Built environment Science to develop a methodology and search for shared values and meanings in the social ,built environment contexts.

Personal observations and recording of the behavior of heterogeneous and homogeneous peoples in Sweden under different social events and inside different built environment contexts has been done. The result shows

-Our divers subjectivity as individuals prevent us to communicate and to be integrated socially, thus reduce our chances to feel well.

-The more plasticity of the brain the more compensation, adaptation to the new situations.

-The more plasticity of the brain the more easily to come over stressor and the more easily to block any disturbing stimuli through meditation and concentration mechanism.

-Having the same experiences, values, meanings enhance the feeling of belonging and happiness and led to better communication, better integration and enhancing the well-being.



#### P26. Azad I. Najar (Sweden)

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#### New Laparoskopic Suturing Technique – Animal Study

Today laparoscopic suturing technique is both difficult and timeconsuming, it requires a long time training. there is a need for a more flexible and easier way to learn suturing technique. Laprotech AB, which is based in Sweden, has developed and patented new instruments for laparoscopic suturing. Azad Najar, urologist, who is working as a senior consultant at the general hospital in Västerås, Sweden, is the inventor of the new instrument and he is the founder of the laprotech company. Testing of the new system the "Najar suturings system" is performed in collaboration between urologists and surgeons. The new instrument will be used for all type of surgery, where laparoscopic suturing extensively used. The new instruments have been used in a concept study on animals and on animal trial in Uppsala. The system consists of three separate instruments, Najar needle instrument, Najar clips instrument and Najar clip applier instrument, The three instruments together perform the suturing process in 1,5 minutes per single stitch. The instruments can perform single as well as continuous suturing. In Najar needle instrumentet which is 10 mm in outer diameter, the needle is permanently mounted on the instrument and is located inside the instruments shaft. After introducing the instrument into the abdomen the handle is activated and the needle moves forward and lies at an angle of approximately 80 degrees to the shaft. The needle is special designed to bring the surgical thread from one side of the tissue to the other side, The Najar clips instrument is 5 mm instruments. wich send a clip around both suture threads to be clamped using najar clip applier instrument, which is 10 mm instruments. The instruments, can be used by both right-and left-handed surgeons. The instruments, our experiences from these concept studies and from life operations will be presented at the 3rd Scientific World Kurdish Congress (WKC2013).



#### P27. Ziyad Raoof (Poland)

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#### The Polish Experience Within the Scope of Cooperation with Diaspora as a Valuable Example for the Kurdish Process of Nation Building

"Polish experience within the scope of cooperation with diaspora as a valuable example for Kurdish process of nation building"

Problem: There is a strong need for the intensification of cooperation between Kurdistan Regional Government and Kurdish diaspora. We still do not take advantage of huge intellectual potential of Kurdish diaspora in nation building process.

Objective: The aim of this project is to prove that it is possible to build successful, efficient and institutionalized cooperation between Kurdistan Regional Government and Kurdish diaspora scattered around the world. Organizers of the World Kurdish Congress 2013 mentioned experience of Jewish and Armenian diaspora whereas I would like to emphasize that Polish diaspora is equally efficient and worth to watch. Currently Polish Ministry of Foreign Affairs assesses that there are 15- 16 millions Polish people living outside Poland. Consequently, there are many organizations and programs that specialize in contacts between Polish diaspora and mother country.

Methods to solve the problem: During my presentation of potential solutions I would like to refer to Polish experiences, initiatives and institutions. Cooperation between Polish diaspora and motherland is realized at the stage of central government, regional government and non governmental organizations. Each of authorities have their own programs, institutions, medias and periodic events. They have been

successfully working for many years. Central government realizes Government Programme of Cooperation with Polish people and Poles abroad and four strategic aims of policy regarding diaspora issues. Regional governments have special committees on cooperation with Poles abroad and organize every year summer holidays for Polish children living abroad to improve their knowledge about Polish culture, history and language. There are also many non-governmental organizations which are in charge of cooperation with Polish diaspora like Polish Community, Polonia Houses, Polish American Congress and even special television channel for Polish diaspora- TV Polonia.

Conclusion: Polish institutions and experiences could be valuable example for Kurdish process of nation building. What is also important, they may be successfully implemented in contemporary Kurdistan conditions. Kurdistan Regional Government have both financial and organizational possibility to put this solutions into effect. Simultaneously, Kurds living abroad are also ready to take part in this process due to their high skills, contacts and education. Result: Strengthening of cooperation between Kurdish diaspora and mother country. The increase of the national consciousness, historical knowledge and feeling of bond with motherland among Kurds living abroad. Elicitation of huge potential of Kurdish diasporaher qualifications, motivation, contacts and education. In addition Kurdish minorities in other countries that creates strong institutions, programs or medias will be more respected by governments. It may result in more efficient lobbying for Kurdish dealings, for example recognition of Kurdish Genocide.

Key words: diaspora, cooperation, Poland



#### P28. Dilshad M. Razawa and Erik Knudsen (UK)

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#### Cinematizing Genocide: Exploring Cinematic Form and Its Relationship to the Hidden Voices of the Kurdish Genocide of 1988

As Fresnadillo Martínez mentioned, cinema is a "true empire of the senses," and the message it conveys is sometimes political or philosophical. Yet, this message is delivered in an artistic way, which leaves a great impact on us, the spectators.

Therefore, from the first emergence moving image has been used to capture reality, witness trials, and grant people a sense of immortality. Following the Armenian genocide and the First World War, journalists, politicians and everyday people began to recognise film as a powerful device for documenting and considerate atrocities and acts of war.

This research project tries to study some additional attempts in the same field, particularly in the Middle East. The objective is to demonstrate the shortcomings of these attempts in their representation of the impact of these atrocities on survivors and to seek alternative ways to represent and reveal the incomprehensible aspects of genocide experiences which often lie hidden behind silent voices. By exploring cinematic form to cinematize the impact on the survivors' of Kurdish Genocide campaign in 1988, the project tries to tease out hidden perspectives about the whole tragedy.

This paper will demonstrate practice through research work which attempts to transfer the survivors' individual memory to collective memory through story, thereby conveying these to a cosmopolitan memory by mediating the collective memory.

The study aims to find new methods of representation through numbers of experimental film practice exercises which give the scholar opportunities to expand his knowledge of the notion of cinematizing. By reflecting on these experimental pieces of work, the scholar will illustrate how these experimental exercises will shape the final research outcome, which will be a feature film.

In the presentation I will show different types of the experimental clips and reflect on the outcome of these exercises.



#### P29. Simon M. Schleimer (Germany)

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## Back to an Outland – The Return Migration of Kurdish Children to Iraqi Kurdistan

Kurdish people from the Kurdish region in Iraq came since the 1980ies in high numbers as refugees to Germany. Today more than 70.000 kurds from Iraq are living in Germany. But since the deposition of the regime of Saddam Hussein in the year 2003 you can notice a certain amount of kurdish families who return to the kurdish region. Various institutions (for instance AGEF, BAMF) make clear that there is an increased trend to go back to Kurdistan. Rough estimates show that more than 10.000 people from Germany return to Iraq because of the secure political situation in this region as the UNHCR always states.

Because of the return migration flows many children, most of them are born in Germany and have the german citizenship, come back without having adequate knowledge about the kurdish language, the society, culture and traditions. So they have to deal with a fully different world. This is in the phase of the adolescence an outstanding challenge.

To make matters worse, the expectations of the locals are different: The kids and youth are getting confronted with a continuous patriarchal orientated and highly traditional society with specific gender imbalance, living conditions and circumstances.

In Germany most of the children acquired a certain cosmopolitan and hybrid concept of life and living with elements of the kurdish and german culture. But most of them never doubt their social affiliation to Germany that is essential for their own identity, personality and mindset. Thus they get into significant loyalty and identity conflicts and accept the return migration solely as a transit social space which they want to leave again as soon as possible. Eventually they aspire, equipped with the german citizenship, to migrate back to Germany.

My research-project looks on the question how kurdish boys and girls experienced the return migration and which strategies, aims, wishes and perspectives they develop to overcome the challenges in the kurdish region. I am asking for the chances and risks of transnational childhood and youth and focus on the factors that lead to success and the conflictive factors that lead to failure. The main focus of attention are the narrative "in depth" interviews with around 30 girls and boys in the ago from 12 to 25. The narrative constructed structure of the interview initiates an associative reflection so as ideas, thoughts and memories flower out beyond a rational narration of the facts and without an emotional meaning. In this way the latent and hidden aspects are going to become apparent. I combine narrative interviews with elements of ethno-psychoanalysis to catch the latent context of the return migration.

The question is if the kurdish society, which is still in a massive transformation process, is willing to use the resources and potentials of the return children and youth or if it sacrifices the potential to the tradition and patriarchal structures.

One central outcome will be that important maturation processes are partial questioned. Girls experience a degradation of their identity whereas boys in this patriarchal structured society experience a strengthening of their identity.

Keywords: Remigration, transnational migration, chances and challenges of kurdish youth



#### P30. Shuela M. Sheikh-Abdullah (Kurdistan Region)

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# The Morphological Features of Mica and Chlorite Minerals in Fine Sand Fraction in Some Forest Soils of Kurdistan Iraq

This study was conducted to investigate the morphological features of mica and chlorite minerals in fine sand fraction in some forest soils. Soil profiles were taken from seven different sites of forest soils. Which include Xalakan-Pine, Dukan-Oak, Baxy-baxteyare-Pine, Goizha-Cypress and Goizha-Olive. Near each above sites, a reference site of soil was dug and they had the same above properties, but are abandoned soils. Soil samples were analyzed for some physical, chemical and mineralogical properties in the soils. The following results were obtained and can be summarized as follows: Results of chemical analysis were exhibited that the pH values for studied soils were ranged between moderate slightly acidic to alkali (6.62-8.36). The results of electrical conductivity (EC) indicated that all studied soils were non-saline, and the value ranged between (0.13-2.07 dS.m-1). Amount of calcium carbonate equivalent indicated that the studied soils were calcareous to extremely calcareous soils and the amounts of total and active CaCO3 were ranged between (50-495 g.kg-1) and (10-225 g.kg-1) respectively. The values of cation exchange capacity were ranged between (25.8 and 39.05 Cmolc kg-

1). As well as the results showed a decrease in content of organic matters with depth in all studied soils. The results of four forms of K in soils: soluble, exchangeable, Non-exchangeable, and mineral were (0.0014-0.0595), (0.40-1.51), (0.02-1.66), and (17.83-38.72) Cmol kg-1 respectively. The change in morphological features of fine sand fraction due to weathering by using optical microscope was investigated and the results showed that the grains of these minerals from individual soil horizons had different colors, those from the surface horizons were have a dark brownish spots, presumable due to staining by organic matter, those from (B) horizon have a yellowish grey-to yellowish brown spots, and those from the (C) horizon were sometimes grey, similar to the parent rocks. In general, almost the grains of chlorite were kept up their green color with depth in all studied pedons, while the surface of these grains in top soil were stained by dark brownish to dark spots, due to partial oxidation of chlorite minerals at the surface soil horizons. The optical microscope examination indicated that mica grains generally occurred as thick particles with different stages of layer separation. They were weathered with layer separations and bending at their edges. However, in control pedons, weak layer separation at the edge was observed.

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#### A Better Urban Lighting for New Kurdistan

The Kurdistan urban context has been damaged by many years of war, injustice and oppression posed by the previous Iraqi regime. The new Kurdistan Plan focuses on adopting a strategic planning approach to implement a sustainable development process and vibrant urban environment. This significant strategy, which is highly appreciated from an urban planning and designing point of view, which this paper investigates, addresses the need for lighting design to define the identity of the urban context, which by itself could develop the tourism-path, when THE DAY IS OFF.

Recently, the concept of urban lighting has had various new terms added to it. Competing cities, new identities and; localities are the new concepts that all the city authorities focus on to show their cities uniqueness and Kurdistan is no exception. There are two common aspects in lighting design for cities; even though it is impossible to strictly divide these two parts from each other, in a broad sense, we can define them as functional and aesthetical aspects. The functional aspect, which is exactly the reason of lighting implementations for public, mostly focuses on creating safety and security in the public realm. And, light as a tool of encouraging social interaction and application to improve feeling of safety and confidence in Kurdistan is highly considered.

The second, aesthetical aspect has become prominent in urban lighting since the end of 20th century. It has a broad scale emphasis on the city's components, such as the monuments, districts, squares

and so on. And, Kurdistan as a developing, interacting- dynamic structure has the potential of representing a decent, specific and an attraction image to citizens and the international society by a proper lighting design.

However, it remains to be seen whether all the parts of Kurdistan have available the decent connection at night which they have during the day. To address this problem, which is a significant deficiency for social environment based on environmental safety issues, in spite of all facilities and possibilities offered by the architects and urban designers, "Lighting Design" proposed here is to improve the urban safety and consequently urban identity during the night. As a lighting designer and urban designer, helping to realise a conceptual design that creates a unique atmosphere, is needed. Therefore, working with architects and urban planners, combining functional and aesthetic lighting to give numerous urban environments a new visual expression and a distinct identity is the main concept of this paper.

As a conclusion, the study confirms, one more time, the importance of light for guiding people and supporting the feeling of safety. Of course, it is obvious that urban lighting is not the only infrastructure to improve safety and security or visibility or accessibility in the city. In other words, lighting must be the tool to represent the dynamic structure of the city with its history, architectural values and so on.

Key words: lighting design, identity, safety



# Perspectives on Kurdistan's Economy and Society in Transition

Almas Heshmati, Alan Dilani, Serwan Baban Editors

The First World Kurdish Congress was held on October 2011 at Rotterdam with the theme of researching science and culture towards increased progress in Kurdistan. The papers presented focused on various important aspects of health, education, economy, culture and political science in Kurdistan. The objective was to establish a network of academicians to develop and exchange knowledge on how to further enhance the progress within the Kurdish society.

This volume is a collection of 20 studies presented at the Congress. The presentation topics are diverse, covering several areas pertinent to the current Kurdish situation. The studies are divided into eight areas including: human rights and freedom; greater Kurdistan, education and nation building; diaspora; politics and international relations;

corruption; health care and trauma; and economy, business and science and

technology. The book published by NOVA Science publisher in USA and marketed globally, it will be available at major libraries around the world. The aim is on an annual basis to publish selected papers presented at each congress in collected volume(s). The editors are expecting this publication series to strengthen WKC in its objective to establish a strong network of researchers, decision makers, social planers and business community to achieve our goals in the process of transition of the Kurdish Society.

The Editors provide a compilation of recommendations emerged from the Congress to the KRG- Kurdistan Regional Government. These include: promotion of health; establishment of a network of academics in the diaspora to gain from intellectual capital outside Kurdistan; modernization of the higher education and other institutions to increase quality and capacity of human capital to play a direct role in the process of nation-building and wealth creation; promotion of good governance, accountability and transparency; promotion of research on important issues such as cross-border social, political and economic integration of Kurdistan; supporting comprehensive research on major crimes against the Kurdish nation so they are internationally recognized; preparing different laws, rules and regulations needed to enhance economic development; and finally establishment of a national legal team composed of international and national experts to assist the Regional Government in relation with for the Kurds vital issues such as genocide, war crimes, displacement, human rights and the rights to self-determination.



ditors Heshmati - Alan Dilani - Serwan M. J. P.-

# Perspectives on Kurdistan's Economy and Society in Transition



# Perspectives on Kurdistan's Economy and Society in Transition Volume II

Almas Heshmati, Alan Dilani, Serwan Baban Editors

The second scientific World Kurdish Congress was held in October 2012 at Hewler with the theme of improving the quality of life, science and culture for progress in Kurdistan. The papers presented focused on various important aspects of culture, economy, education, health, industry and political science in Kurdistan. The objective of this conference was to create a network of academicians to exchange and develop knowledge and work together with the Kurdistan Regional Government on how to further enhance the progress within the Kurdish society.

This volume is a collection of 26 studies presented at the Congress and includes an introduction by the editors and a summary report of the Congress. The topics presented here are diverse, covering several areas pertinent to the current Kurdish situation. The studies are divided into ten areas: namely, agriculture and rural development; 
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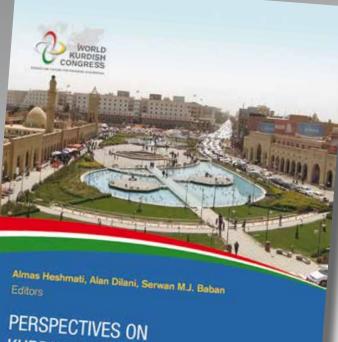
Almas Hashmati, Alan Dilani, Serwan M.J. Baban Editors

PERSPECTIVES ON KURDISTAN'S ECONOMY AND SOCIETY IN TRANSITION, VOLUME II

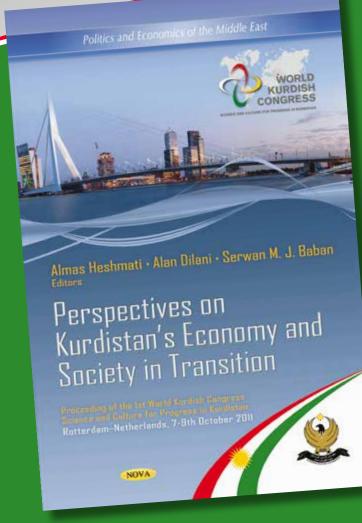
diaspora; education and research; health and quality of life; industry; information technology and e-government; infrastructure and development;

language; human rights; and politics. In the last part of the volume, the organization committee provides a compilation of recommendations from the Congress to the Kurdistan Regional Government.

Almas Heshmati is Professor of Economics at the Department of Economics, Sogang University, Seoul, South Korea. His research interests include applied microeconomics, globalization, development strategy, efficiency, productivity and growth with application to manufacturing and services. In addition to more than 100 scientific journal articles, he has published books on the EU's Lisbon Treaty, global inequality, East Asian manufacturing, the Chinese economy, technology transfer, information technology, water resources, landmines, power generation, and development economics. **Professor Alan Dilani** is a founder and General Director of the International Academy for Design and Health (IADH) in Stockholm, Sweden. He is co-founder of the journal World Health Design. Professor Dilani has been engaged worldwide in several universities in the field of Design and Health, developing a "Psychosocially Supportive Design Program", in Medical and Design institutions. He received his PhD in Health Facility Design from the Royal Institute of Technology, Stockholm. **Professor Serwan M.J. Baban** is Minister of Agriculture and Water Resources of the Kurdistan Regional Government. He has served as Vice Chancellor of the University of Kurdistan Hewler (UKH). His academic and management career was developed through working in universities in the UK, the Caribbean, Australia and Iraq. He has founded and directed several successful research centers and institutes worldwide. He has published over 150 journal papers, book chapters and conference proceedings, in addition to three edited books. Perspectives on Kurdistan's Economy and Society in Transition Volume II



KURDISTAN'S ECONOMY AND SOCIETY IN TRANSITION, VOLUME II



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