

Individual Projects:

Aziz Al-Azmeh, Distinguished Visiting Professor of History, Central European University, Budapest, Hungary (February 2005 – November 2005)

Research Project: *Islam in Late Antique Civilisation*

The research project in which Professor Al-Azmeh is engaged has been going on for the last six years, and he is hoping to expand the basic text of a relevant book during the tenure of his fellowship. It involves a host of questions connected with the relationship between the genesis of Muslim empires and of the Muslim religion with the heritage of Late Antiquity in the Middle and Near East. It aims at clarifying and specifying questions of periodisation arising from the literature on Late Antiquity that has been produced in recent years, and dealing with the major question of historical categorisation, the

constitution of objects of historical study as Late Antique, Islamic, Eastern, Western and so forth. It follows the genesis of certain crucial respects of the Muslim religion in light of studies of the genesis of Christianity and of late Roman henotheism, and the constitution of Muslim imperial structures, including the monetary bases for such imperial structures. The study in process uses literary sources from a variety of genres and in a variety of languages, as well as epigraphic, numismatic, and archaeological materials.

Francois Bocholier, (Junior), Lecturer, Université Marc-Bloch, Institut d'Histoire Contemporaine, Strasbourg, France (October 2004 – February 2005)
Ph.D. Candidate, Université Panthéon-Sorbonne, Institut Pierre Renouvin, Centre de recherches et d'histoire de l'Europe centrale contemporaine, Paris, France

Research Project: *The Transylvanian Political Elites, from Hungarian Kingdom to Greater Romania in 1910-1930*

Bocholier's doctoral research dealt firstly with the question of the political integration of Romanian Transylvanian elites in Greater Romania after 1918. This proved to be a very difficult process because their aspiration for self-government - justified by the cultural specificities and separate history of the province - clashed with the centralist and unilateral policy of Bucharest.

In order to understand better the origins of political discontents, he began more recently to focus his research on a social historical approach of the elites. He wondered what kind

of possibilities they had to maintain or improve their social status in the framework of a unitary national state. He did this research using the prosopographical method. A database of over one thousand items had been created, including not only Romanians but also Transylvanian Hungarians and Germans (Saxons). Built around a few key fields for each individual (origins, education, profession, political activity), the database helps him understand in what way 1918 as a political event, really changed the life and relative social positions of the different elites in Transylvania.

Calin Cotoi, (Junior), Assistant Professor at the University of Bucharest, Faculty of Sociology and Social Work, Bucharest, Romania, Participant in the 'We the People' Project (see project details at the end of this document) (January 2005)

Mr. Cotoi's Research Project will be available later.

Thomas Csordas, Professor of Anthropology and Religion, Case Western Reserve University, Cleveland, OH, U.S.A. (June 2005 – July 2005)

Research Project: **Meaning, Healing, and Identity in Contemporary Navajo Society**

Work on a book based on data from Prof. Csordas's ten-year-long ethnographic study of therapeutic process in Navajo Indian ritual healing, the Navajo Healing Project (NHP). This book will examine meaning, healing, and identity politics on three levels in contemporary Navajo society. The first level is the personal, experiential level of transformation and affliction among individual healers and patients. The second level is the social level in which several different forms of religious healing interact within the health care system

on the Navajo Reservation. The third level is that in which healing articulates Navajo identity vis-a-vis the dominant North American society's medical healing system and its popular culture. Also, research will be initiated on similar themes of meaning, healing, and identity in Hungary. The research will include investigation of the contemporary Hungarian interest in both global and indigenous forms of "shamanism," and investigation of the Catholic Charismatic Renewal movement in Hungary.

Ayse Erzan, Professor of Physics, Istanbul Technical University, Turkey (October 2004 – July 2005)

Research Project: **Mathematical Models of Networks with Hidden Variables - Modelling Genomic Interactions**

Professor Erzan and her group has introduced and studied a null model for gene regulation based on sequence matching, which seems to imply that certain global characteristics of such networks are

emergent rather than evolved. Further research will be devoted to the effects of gene duplication and divergence, and possible evolutionary pressures, which may have operated on this emergent network.

Chrisantha Fernando, (Junior), 1st Year DPhil at Center for Computational Neuroscience, COGS/BIOLS, University of Sussex, England (October 2004 – February 2005)

Research Project: **Chemoton Model for the Origin of Life**

Fernando considers the minimal cell which consists of at least an autocatalytic metabolism, an autocatalytic boundary and an autocatalytic template replication system. Tibor Ganti proposed the "Chemoton" organisation for such a minimal cell, which has a Formose Reaction metabolism, RNA like non-enzymatic template replication and a lipid membrane. How can such a system originate and what are the details of its function? Fernando concentrates on the evolution of metabolism and template

replication in minimal cells. The computational models are more chemically realistic than the models of Kauffman, Jain and Krishna, Fontana, Kaneko and others, because they consider the conservation of mass and energy. Under these circumstances forming autocatalytic sets is not so easy! A stochastic model of non-enzymatic template replication suggests that elongation and replication of long nucleic acid templates is possible in minimal cells under conditions of oscillating temperature, by staggered re-association of separated strands. Long

strands act to “mop up” short strands. During the fellowship, these *in silico* models will be elaborated and integrated

with very recent *in vivo* experiments. These experiments so far appear to validate the predicted mechanisms.

Ottó Gecser, (Junior), PhD. Student, Department of Medieval Studies, Central European University, Budapest, Hungary, Coordinator of the Multiple Antiquities, ‘Multiple Modernities’ Project (see project details at the end of this document) (October 2004 - July 2005)

Research Project: **Everyday uses of rhetoric: Its education and popularisation in Hungary**

The second half of the nineteenth century was the last period when it was still true that *verba volant*; the last moment before the emergence and diffusion of the various technologies of voice and image registration; the last moment when a speech could still have an impact comparable to that of its ancient models without microphones, TV-cameras, video recorders. My research topic would be the reception of classical rhetoric in the practical discourse about public speeches (ecclesiastical, political, and domestic-occasional) in late nineteenth-century Hungary. How were the uses of rhetoric, its

historical sources and methods portrayed in the various publications pertaining directly to it, and classified according to genre (e.g. textbooks, handbooks, manuals etc.) and/or readership (students, male and female, of various types of high schools and colleges, preachers of different confessions, politicians, domestic-occasional speakers). How were the classical models adapted to the modern situations and to the different types of readership? Why and how was rhetoric inserted in the curricula of various educational institutions? How was it related to the teaching of Latin and culture of Latinity?

Gábor Gedeon, (Junior), Ph.D. in Evolutionary Biology, Department of Genetics, Eötvös Loránd University, Budapest, Hungary (March 2005 – July 2005)

Research Project: **In Silico Investigations of Animal Life Cycles and Master Control Genes**

Over the last ten years, evolutionary biology has experienced a revolution through the broad array of discoveries at the boundary between evolutionary genetics and developmental biology (Raff 1996, Carroll, 2001 Arthur, 2002). Due to the birth of this new discipline “evo-devo”, fundamental novel questions have arisen: Were Pre-Cambrian metazoan ancestors similar to larvae or to miniature adults? How can complex animal life cycles emerge through adaptive mutational steps?

2. Why do highly conservative regulatory genes (master control genes) exist?
3. Can gene expression patterns reveal true homologies between developmental features of distantly related organisms?
These questions seem to be distinct problems but have the same modelling root. Investigations require multi-cellular model systems.

Michael Guggenheim, (Junior), Dr. des., Researcher, Collegium Helveticum – ETH Zürich, Switzerland, Guest of Zuger Kulturstiftung Landis & Gy (October 2004 – February 2005)

Research Project: **Change of Use. The Transformation of Functionalism in Architectural Theory and the Social Sciences**

Since the 1960-ies the idea of change in the use of architecture has become prominent. As a result, questions about the function of architecture turn into questions about the change of functions and multi-functionality. The traditional notion of the function of architecture becomes determined by the observer and time. Furthermore, the notion of function is detached from materiality and has become socialised. A change of use must thus be framed as much an architectural as a sociological and an anthropological concept. The project will investigate the theoretical history of the idea related to the change of use and to changes in the term ‘function’ in

architectural theory and the social sciences. This double analysis assumes that the crisis and redefinition of function in both disciplines constitute a theoretical underpinning for the new discourse on the change of use. The central questions of the project are thus: Why did such a crisis happen in both disciplines at the same time? What consequences this crisis will have regarding the conceptualisation of architecture? The project explores new relations between the social sciences and architectural theory, and puts the important problem of the change of use on the map of current social and architectural theory.

Richard Higgott, Professor of International Political Economy, University of Warwick, UK, and Director of the ESRC Centre for the Study of Globalisation and Regionalisation, University of Warwick (October 2004 – April 2005)

Research Project: **From Colonialism to Global Governance: Order, Efficiency and Accountability in the Theory and Practice of Extra-Territorial Politics**

This project examines the role of ‘extra-territorial politics’ in global orders. It covers a period from the late colonial era through to the present day. En route it takes in the decolonisation period of the 1950s and 1960s, the era of the New International Economic Order of the 1970s and the eras of the Washington and Post Washington Consensus of the late 20th and early 21st century. ‘Extra-territorial politics’ refers to the manner in which an understanding of governance and politics, beyond the confines of the domestic borders of major global actors, has developed in two historical periods and two institutional contexts. The first, the era of colonialism and decolonisation from 1870 to 1960, is concerned with the theory and practice of governance via the creation of the political institutions put in place by colonial powers in overseas territories as a prelude to independence. The second, the

‘era of emerging international governance’, focuses on the development of the international economic institutions (especially the IMF and the GATT/WTO) in the post World War Two era. The link between the two eras and institutional contexts—different discourses notwithstanding—is the existence of common epistemologies and ontologies of ‘governance’ and ‘politics’ in both periods. The ‘public administration’ of the colonial era, and the ‘public policy’ of the modern era, both exhibit continuity in their appreciation of what constitutes ‘governance’ and how it should be inscribed beyond the confines of the state. The project identifies a fundamental tension overtime between governance as ‘order and efficiency in decision making’ and accountability (and representation) in the process of decision-making’. In so doing, the project also provides a genealogical analysis of

two strands of scholarship—comparative political development and international political economy—in the study of extra territorial

governance in the 20th century and argues for an end to their binary separation.

Ferenc Jordán, (Junior), Postdoc Researcher, Department of Plant Systematics and Ecology, Eötvös Loránd University, Budapest, Hungary, Holder of the Branco Weiss Fellowship, (October 2004 – 30 September 2005)

Research Project: Characterising Key Persons in Social Networks - The Analysis of Signed Social Graphs

Jordán's basic interest is how social network dynamics is correlated to certain network parameters and who are the „key persons” possibly responsible for maintaining the structure. Among others, the sociometrical „net status” index of Harary (1959), slightly modified and applied later in ecology (by Jordán and his fellow researchers in 1999 and subsequent years) is now used for comparative analyses of social and ecological networks. Key network positions in classrooms, suggested to characterise key persons, will be determined and results will be compared to those from ecological community network analyses. Social relationships of seven classes in three Budapest secondary schools are surveyed during four years providing a longitudinal data base of

signed, directed and weighted social networks. Novel ecological network indices, assessing indirect effects, are also planned to be calculated in both scientific fields. One of the most interesting questions is whether and how the „enemy of my enemy” – type positive indirect interaction turns frequently into a direct positive relationship. The analysis of signed graphs will be simultaneously developed in ecological and sociological network analysis, following Roberts' seminal book. Further indices are also quantified and discussed. Various mathematical expressions of positional importance are calculated and it is analysed whether structural key persons really play key roles in community dynamics.

Christer Jönsson, Professor, Department of Political Science, Lund University, Lund, Sweden (February 2005 – April 2005)

Research Project: Essence of Diplomacy – a Book Project

As an outgrowth of a Bank of Sweden Tercentenary Foundation project, “Essence of Diplomacy,” Christer Jönsson plans to work on an advanced textbook on *Diplomacy, Negotiation and Mediation* for Sage Publications, which attempts to systematize and problematize four different analytical perspectives guiding the study of diplomacy, negotiation and mediation. Diplomacy and diplomatic methods can be analyzed as (1) strategic interaction, (2) communication processes, (3) processes of delegation and representation, and (4) processes of institutionalization. The strategic interaction perspective puts emphasis on rationality and

cost-benefit calculations among interdependent actors, as epitomized in the game-theoretical perspective. In a communication perspective, the transmitting of messages between independent political communities is an essential aspect of diplomacy and negotiation. A delegation or representation perspective zeroes in on the fact that diplomats represent – that is, act for, stand for, and negotiate on behalf of – others. An institutionalization perspective, finally, views diplomacy as a key international institution and points to the institutionalization of international negotiations.

John Kekes, Professor of Philosophy, State University of New York at Albany, NY, USA (September 2004 – October 2004)

Research Project: **The Roots of Evil**

The project is to complete John Kekes's 14th book, the *Roots of Evil*. The existence of widespread evil is a permanent threat to human well-being. In religious, ideological, racial and ethnic conflicts, in unjust wars, terrorist attacks, or violent crime, and the drug trade innocent people are murdered, tortured and assaulted. All over the world, cruelty, greed, prejudice and fanaticism ruin the lives of countless victims.

Outrage provokes outrage. Millions nurture a seething hatred of their real or imagined enemies. The forces of barbarism continually break through the superficial layer of order and threaten the security of a substantial segment of humanity. The problem of evil is to understand why people act in these ways and to find out what can be done about it. These are the aims of this book.

Kinga-Koretta Sata, (Junior), Lecturer, Babeş-Bolyai University, Department of Political Sciences, Cluj-Napoca, Romania, Participant in the 'We the People' Project (December 2004-January 2005)

Research Project: **Transylvanian Romanian National Liberalism in the 19th Century**

The research maps the discursive map of Romanian national liberalism in the context of 19th-century Transylvania. It describes the evolution of this political idiom from its incipient stage (the 1830s) till the debates around the Hungarian-Austrian Compromise (1867). It analyses the political discourses

developed by the Romanians in their complex relationships with the Hungarian national liberal discourses, the Romanian liberal discourses developed in the Danubian Principalities, and also maps the transfer of ideas from/to Western European liberalisms.

Gideon M. Kressel, Professor, The J.Blaustein Institute for Desert Research Midreshet Sde-Boqer, Israel, The Department of Behavioral Sciences, BGU, Be'er-Sheva, Israel (February 2005 – August 2005)

Research Project: **Informalising the Economy; Looking for Loopholes: Survival Strategies in use of Disenfranchised Social segments of the Former State-Socialist Countries Along the Institutional Transition to Market Economy: 'Milking the Mountain', Petty Trading and New Capitalists** – An anthology prepared by Prof. Y. Konstantinov of the New Bulgarian University, Prof. Trond Thuen of The Tromso University, and Gideon M. Kressel.

During the past decade or so, Prof. Kressel has applied himself to investigating the conditions of living and livelihood of marginal populations within states as diverse as China and India. In Bulgaria, together with colleagues from the New Bulgarian University and the University of Tromso, Prof. Kressel has been studying how Gypsy petty traders use market systems to adapt to post-socialist conditions. (One basis for this

research is Prof. Kressel's own research on the Bedouin market in the Israeli city of Beersheba). Part of the Bulgarian research has been published in the *American Ethnologist*, and at present the team are putting together a book on this work, which has been submitted to the CEU Press. At Collegium Budapest, Prof. Kressel proposes to work on the finer points of the essays of this book.

Judith Kuckart, Writer, Berlin, Germany, Guest of Zuger Kulturstiftung Landis & Gyr (October 2004 – January 2005)

In Budapest Judith Kuckart works on her latest novel with the work title „Kaiserstrasse“. The story starts in 1957, one day before All Saints' Day in Kaiserstrasse, Frankfurt am Main, and comes to an end precisely 46 years later. It tells

about the lives of two people: Leo Böwe, born in 1935 and Jule Böwe, born in 1960. The father and his daughter do not have much in common, but this is precisely what makes them connected for a lifetime.

Ádám Kun, (Junior), Post. Doc. at Loránd Eötvös University, Department of Plant Taxonomy and Ecology, Budapest, Hungary (January 2005 – May 2005)

Research Project: **A Modelling the RNA World - Introduction of Real RNA Structures to Models of Prebiotic Evolution**

The origin of life is one of the most intriguing questions of evolutionary biology. One of the leading theories in this field suggests that an “RNA world” predated the present DNA – protein world. In this RNA world RNA molecules stored information and at the same time functioned as enzymes. Kun will study the transition from small oligonucleotides to complex RNA metabolic networks by means of computer simulations. In this study he assumes that these networks

evolved on surfaces, where the mobility and interaction neighborhood of the molecules are limited. Former studies only used abstract molecules, now, however, reliable algorithms are available to assess the secondary structure of RNA's. As a novelty, he will represent the RNA molecules with their theoretically calculated secondary structure. This will be the first theoretical study to include real RNA molecules rather than abstract ones.

Anna Kuznetsova, (Junior), Researcher, Medieval Dept. Institute of Slavic Studies, Russian Academy of Sciences, Moscow, Russia (October 2004 – February 2005)

Research Project: **Missionary Hagiography in Medieval Central and Eastern Europe**

In this research project Kuznetsova intends to investigate the Lives of saints who served as missionaries (in the widest sense, i.e. including those who were teachers of the recently converted) to Central and Eastern Europe in the ninth-eleventh centuries. For comparison, however, she will consider the Lives of holy

missionaries and teachers from other time periods and regions as well. In a more general sense, she focuses on these churchmen as agents of change and on their lives as reflections of and guidelines to crucial moments of historical change.

Benedek Láng, (Junior), Researcher in the History and Theory of Science Research Group of the Hungarian Academy of Sciences; Dept. of Philosophy, Technical University, Budapest, Hungary (October 2004 – February 2005)

Research Project: **Learned Magic and its Readers in Central Europe** (Preparation of the text of his doctoral dissertation for publication at the Pennsylvania State University Press)

What texts of magical content can be found and identified in the manuscript collections of Central Europe? What are those further texts which have not survived? To what extent does this group of magical texts represent an "original" intellectual production of this region? Who are those persons who were in one way or another responsible for the emergence of the magical sources? What was the place of learned magic in their interest? What was the purpose of copying? Did they intend to apply the

divinatory procedures, magical formulae and ritual invocations? Or did they just want to learn about them, and did magic simply belong to a pure "academic interest" of the collectors? Did these scribes, collectors, authors and practitioners form a coherent group, a company of friends? Did they copy the texts from each other's codices, did they discuss the content, did they put this content into practice together, or were they isolated intellectuals with no visible connections?

Ingrid Maier, Professor of Russian, Uppsala University, Sweden (September 2004 – January 2005)

Research Project: **Seventeenth-Century Russian Handwritten Newspaper Translations**

Ingrid Maier's main scholarly interest centres on the early handwritten Russian "newspapers" that were produced at the Diplomatic Chancellery in Moscow during the 17th century and right up until the first Russian printed newspaper was established ("Vedomosti", in 1703). In most cases these were translations of Western European printed sources -- political pamphlets, peace treaties, periodical newspapers -- many of which can still be found in libraries and archives both in Moscow and Western Europe. They were produced to inform the Czar and his closest advisers about the political situation obtaining in Europe. These Russian translations are currently being edited in Moscow and volume six (which covers the years 1660-1670) is now in preparation. It will not only contain the Russian texts, but also the

foreign originals of these translations, in so far as they could be identified in the collections in both Russian and European libraries and archives. During her stay at Collegium Budapest, I. Maier will finish her volume of the edition, which contains the transcriptions of more than 550 foreign originals that she has identified (mostly individual newspaper articles printed in German and Dutch, to a lesser extent in Latin and Polish). The volume also contains a critical apparatus and a general introduction about such topics as the cultural and historical background of the largest Western European newspapers in Moscow, the Russian translations (including translators and translation technique), etc. The volume is being written in Russian and will comprise about 500 pages.

Alfred Messerli, Private Associate Professor, University of Zürich, Switzerland (February 2005 – April 2005)

Research Project: **Images as the Scripture of the Laymen (1400-1800)**

Messerli touches a topic, for which much interest has been arising over the last two or three decades in particular – in literary history as well as in ethnology, semiotic studies, in the social history of art, history of culture and of everyday life, and so on. Most of the studies that have been dealing with this phenomenon and the mainly theological and religious background of it, however, have taken the argument of images being the *scriptura*

laicorum for granted. Only very few scholars asked the question to which degree such kind of availability and accessibility, perception and 'correct' understanding of intended messages with the help of lectures actually was and could be realized for and by the illiterates. Messerli will take this issue up. He wants to analyze to which extent the 'iconization' of the illiterates has to be seen as a characteristic cultural phenomenon of the pre-modern society,

and how far imagic iconicity played an important role in the didactic discourses of the period. In a comparative approach, he intends to

find the visual media that were mostly used for and influenced by such an 'iconisation'.

Miklós Müller, Professor Emeritus and Head, Laboratory of Biochemical Parasitology, The Rockefeller University, New York, NY, USA. (October 2004 – July 2005)

Research Projects: **1. Origin and Evolution of Eukaryotes, Primarily the “Amitochondriate” Groups**

The dramatic increase of genomic sequence data and physiological information on mitochondriate and “amitochondriate” eukaryotes and prokaryotes provides a wealth of raw material to reconstruct the physiology and evolutionary history of the highly diverse family of organelles related to mitochondria,

and with this to define the physiological boundaries of eukaryotic life. Professor Müller’s ongoing work focuses on the impact of such new information on our understanding the origins of the metabolic diversity of unicellular eukaryotes.

2. Interaction of Science and Politics as Exemplified in Biology in Post IIWW Hungary

In the post-WWII period, an artificial separation of Soviet and Western science became enforced politically in the Soviet sphere of influence. While this tendency was apparent in many fields of science, possibly it found its most extravagant expression in the biological sciences. The main “hero” of this process in the USSR was Trofim Denisovich Lysenko, an agronomer supported by Stalin himself. He achieved dominance by a steadfast struggle that

began in the late 1920s and culminated with the historical 1948 session of the All-Union Lenin Academy of Agriculture. The history of Lysenkoism in the USSR is amply documented in recent works, primarily in the Russian language, but has been poorly studied in other countries. Professor Müller is exploring this process based on published and archival materials.

John Neubauer, Full Professor of Comparative Literature, Literatuurwetenschap, Universiteit van Amsterdam, Spuistraat 210, 1012 VT Amsterdam, The Netherlands (October 2004 – February 2005)

Research Project: **Figural Studies in the East-Central European Literatures**

This project is conceived as a key contribution to the fourth and last volume in the “History of the Literary Cultures in East-Central Europe” that Professor Marcel Cornis-Pope (Virginia Commonwealth University) and Professor Neubauer are editing. The idea of the volume as a whole and certain of its chapters need to be conceptualized more clearly. The proposed research and writing will produce one long and several shorter essays. These both theoretical and historical essays will define the conceptual framework of the volume as a whole and of specific key topics. It should be added that in

this project such introductions have a very different function from the usual one. They are no summaries of the specific articles, but they develop a theory and aesthetics of writing literary history today, more concretely of writing a history of the literary cultures in East-Central Europe that responds to the national literary histories that played such a prominent role in the rise of nationalism in the region. They will, hopefully contribute to a much-needed general reconceptualization of national as well as transnational histories of literature.

Alexandra Penn, (Junior), DPhil Student, Centre for Computational Neuroscience and Robotics, Life Sciences, University of Sussex, England (October 2004 – January 2005)
Research Project: **Ecosystem Selection: Further Theoretical Development**

Although ecosystems or ecological communities are not usually considered to be units of selection or major transitions in evolution, a response to selection at the ecosystem level has been demonstrated in experiments by Swenson and Wilson. In these experiments populations of microbial ecosystems were created, and selected and “bred” to change “ecosystem-level” traits such as pH, or biodegradation of toxic compounds. In order to respond to selection a population of units must possess heritable variation in the trait for which they are selected. It is not immediately apparent why microbial ecosystems, which have never before been subject to selection, should possess heritable “phenotypic” variation, and thus how they are able to respond to selection. This area raises interesting questions about possible novel mechanisms in evolution, and pre-transition dynamics in non-fraternal major transitions in evolution. In previous simulation models Penn has shown that model ecosystems are able to respond to selection on complex traits, dependent on the interactions of many species in an assemblage, in novel ways distinct from just genetic change in the component organisms. For example, higher-level heritable

variation exists in the form of alternative stable community compositions. Selection can chose between these different communities, with different ecosystem phenotypes, without any need for genetic change in the species. This effect has been found to be extremely dependent on the network structure of the ecosystem. Penn’s work at the Collegium will concentrate on further theoretical development of the ecosystem selection ideas. For example, how do spatial dynamics effect ecosystem selection? Is it possible that such selection could occur between self-organised patches in a landscape without the imposition of a strict population structure by an experimenter, if so under what circumstances? How does individual-level selection interact with ecosystem-level selection in the context of the dependence of species on each other in a trophic network? What role could the ecological dynamic of niche construction play in the facilitation of ecosystem selection, and what can we learn by looking at real examples of artificial ecosystem selection in biofilms such as the yogurt-producing ecosystem popular in Hungary; kefir?

Andrew Pomiankowski, Professor of Genetics, University College London, England (October 2004 – April 2005)

Research Project: **The Evolution of Insect Sex Determining Mechanisms**

The complexity of gene networks poses a formidable intellectual challenge for attempts to explain their evolutionary origins. A. Pomiankowski’s strategy has been to look at a minimal network, the *Drosophila* somatic sex determination pathway. This involves only a handful of genes to achieve the seemingly simple task of instructing the developing embryo to become male or female. The project will present a reconstruction of how the sex determination pathway might have evolved in a step-by-step fashion. It will illustrate how

mutations were recruited in genes which are already part of the pathway and how new regulators of the pathway were favoured, due to selection acting on the sex-determining signal. This allows A. Pomiankowski to explain the major features of the pathway, including additional promoter sites, alternative splicing patterns, autoregulation and genes with several stop codons. The approach reveals that genes are far more than just coding sequences. Account needs to be taken of how genes interact if we are to understand their evolution.

Susanna Rich Lippóczy, Professor of English, Kean University, Union, NJ, U.S.A (May 2005 to July 2005).

Research Project: **Still Hungary: A Memoir** – A book project

The novel demonstrates how the split up of Hungary by the 1920 Treaty of Trianon and World War II determined not only the dissolution of her émigré family, but uncannily, the microcosm of every aspect of her life as an American – from the nature of her physical development to the vicissitudes of writing memoir. She hopes to return to her grandfather's Alma Mater, Eötvös University,

Budapest, for a home base from which to research her historical and cultural ties; to discern deeper, more poetic and archetypal resonances to complete “Still Hungary” for wide global and trade market distribution; and to thereby contribute to the creation of new models for intercultural memoir and international networking.

Christian Strub, Professor of Philosophy, University of Hildesheim, Hildesheim, Germany (May 2005 - September 2005)

Research Project: **Morality and Ethics in German Philosophy Between 1933 and 1945**

The project is based on the conviction that the members of the Nazi Volksgemeinschaft were acting on a specific concept of morality and that it is therefore wrong to regard the relationship between them and their regime solely as a relationship of power and coercion. This Nazi morality appears to be made up of three elements: (1) traditional, partly universal concepts of morality; (2) specific, highly flexible, extremely shallow concepts such as “race”, “blood”, “Volksgemeinschaft”,

“Volksempfinden”, etc.; (3) the transformation of the traditional concepts of morality by these specific, shallow concepts. Key concepts of such a kind of morality and ethics are “honour”, “loyalty”, “duty”, “heroism”, “sacrifice”. From this assumption it seems reasonable to examine the professional discourse on morality and ethics between 1933 and 1945, i.e. the philosophical publications dealing with that issue.

Levente Szabó, (Junior), Senior University Lecturer, Babes Bolyai University, Department of Hungarian Literary Studies, Cluj-Napoca, Romania, Participant in the ‘We the People’ Project (November 2004 – January 2005)

Research Project: **Narrating the People. Folklore and Nation-Formation in Hungarian and Romanian Context (1870–1900)**

Folk culture witnessed a paramount and an unseen renaissance along late eighteenth-century and nineteenth-century Europe. The project will try to explore the role of constructing the ‘folk’ in late nineteenth-century Hungarian and

Romanian nation-formation, that of its core institutions and its agents, respectively, and the roles attached to both the institutions and the agents so as to map the institutional culture of group belongings.

Miriam Torrens Arnal, (Junior), Post-Graduate Student, Ph. D. in progress, Autonomous University of Barcelona, Spain (March 2005 – July 2005)

Research Project: **Siklód. The Times of a Place in Transylvania**

The main aim of the Ph.D. thesis is to produce an open ethnography of a Székely (Sekler) community in Transylvania, taking into account the contemporary social and economic problems of Eastern countries. The Székely minority of Rumania offers an interesting and complex history of national identity, explored rather briefly in Social Anthropology. Besides, in countries like Spain the Székely are an

unknown reality for most of the academic fields. Torrens would like to contribute to knowledge on the basis of a concrete experience. She is increasingly realizing that social life in villages like Siklód does not develop as “transition from socialism to capitalism”, but in accordance with Verdery (1991, 1996) and Berdahl (2000), an original transformation is taking place.

Balázs Trencsényi, Junior Research Fellow and Assistant Professor of History, Pasts, Inc. Center for Historical Studies, Central European University, Budapest, Hungary, Participant in the 'We the People' project and the 'Multiple Antiquities and Multiple Modernities Project'

Maria Zgraggen, Painter, Bürglen, Switzerland, Guest of Zuger Kulturstiftung Landis & Gyr (February 2005 – July 2005)

Vladislav Zubok, Professor of History, Temple University, Philadelphia, PA, U.S.A. (February 2005 – May 2005)

Research Project: **The Soviet „Sixties”: Roots of Peaceful Collapse**

This is a book project to explore the “Sixties,” the period when Soviet society lost its “totalitarian” character, and when the stage was set for influences and trends that eventually produced the peaceful collapse of the Soviet Union. Chronologically this period lasted from Khrushchev’s denunciation of Stalin in February 1956 until Soviet invasion of Czechoslovakia in August 1968. The author uses the large variety of archival documents, private documents (journals and memoirs), oral history sources,

pictorial information (films, cartoons, etc.), as well as relies on the emerging new studies of the post-Stalin social and cultural life. Political, cultural, and intellectual elites of Moscow and Leningrad occupy the center of this project. The study has a panoramic character; it focuses on the events and personalities that emblemized the major trends of the period, but need reexamination and interpretation in the light of the peaceful demise of the Soviet Union and the end of the Cold War.

Focus Groups:

Multiple Antiquities and Multiple Modernities in Nineteenth-Century Europe:

Two Focus Groups are being held at Collegium Budapest between February and July 2005, convened by Collegium Budapest Permanent Fellow Gábor Klaniczay, Ernő Marosi, (Budapest, MTA-Hungarian Academy of Sciences) and Michael Werner (Paris, EHESS) and financed by the Getty Grant Program and the Fritz Thyssen Stiftung.

The **Getty-financed part** of the project is titled **‘National or Universal Antiquities? The nineteenth-century process of “musealization” in Hungary and in Europe’**, and is coordinated by Ernő Marosi and Gábor Klaniczay. The project will focus on the representation of the past by the selection, preservation and display of its relics and monuments that was central to the development of the European nations in the modern sense as of the 18th Century. The underlying process of “musealization” played a crucial role, among other things, in the development of autonomous disciplines related to “antiquities” of various kinds (archaeology, art history, ethnology, *Urgeschichte* etc.), in the construction of national identities by the historicization of the national self-images (the quest for the origin of the nations, the documentation of their allegedly stable identity etc.), and in showing the affiliation of the nation with the universal (or the noblest) culture of mankind. From one country to another, these processes followed divergent patterns shaped by different social, political, cultural and economic conditions, and by the competition between the nations. This investigation will mainly be conducted along the concepts of general interest, such as private vs. public, dilettantism/connoisseurship vs. specialized scholarship, antiquarianism vs. modern disciplines. The chronological extension of the research will be a long Nineteenth Century (starting with the results of the Enlightenment and ending with World War I), while the geographical space would be Central Europe of the time framed by the Austro-Hungarian Monarchy, and placed in a broader European

comparative context. The project will cover the following research areas: reconstruction of the history of late-eighteenth- and nineteenth-century private collections; the mechanical copy as the medium of 19th century art; the history of museums; and the history of monument preservation. The project team will comprise four senior scholars from abroad as “Core Fellows” (Jan Bažant – Prague, Ingrid Ciulisova – Bratislava, Randolph Starn – Berkeley, Georg Vasold – Vienna), two distinguished guests for two weeks (Adam Labuda – Warsaw, Sir David Wilson – London), two Junior Fellows (Gábor Ébli – Budapest, Béla Zsolt Szakács – Budapest) and three Budapest scholars (Árpád Miklós Nagy, Sándor Radnóti, László Török– Associate Fellows). These researchers will closely cooperate with four Budapest institutions in building special databases related to the project: the Institute for Art History of the Hungarian Academy of Sciences, the Museum of Fine Arts, Antique Collection, the National Office for the Protection of Cultural Heritage, the Museum of Ethnography, and in each of these we will have a cooperating partner (Associate Fellow), assisting our project (Edit Szentesi, János György Szilágyi, Pál Lővei, Zoltán Fejős).

The Thyssen-financed part of the project is titled **Antiquities and Their Entangled Histories in Nineteenth-Century Europe**, and is coordinated by Michael Werner and Gábor Klaniczay. The project will deal with the aspects of general intellectual history, philosophy and classical philology. Following a long series of preparatory discussions and workshops since 2000, this project examines how different nations perceived and used, mostly in the 19th Century, ancient (antique and medieval) traditions for their self-definition, and what diverging visions of modernity emerged from this rediscovered, reinterpreted and/or invented tradition. The principal interrogation of the project focuses on the various images of antiquities, which have shaped European humanities since the end of the 18th Century,

and engages in an all-European comparison on the emergence of classical studies, their repercussions in higher and secondary education, the foundation of museums, the formation of the academic disciplines of the humanities and their specific institutional background, the use of models of classical antiquity in national self-definition, as well as the presentation and appropriation of antiquity in translations, and in theatre. It compares the hitherto less researched East European reception process to the well-known paradigms of the German, French and English use of the antiquities, aiming at a more extended and balanced overview of Europe from this respect. The project team comprises nine senior scholars from abroad for a period two weeks to four months as "Core Fellows" or Visiting Scholars (Chryssanti Avlami – Paris, Jerzy Axer – Warsaw, Maria Kalinowska – Torun, Poland;

Pierre Judet de La Combe – Paris, Diana Mishkova – Sofia, Glenn Most – Pisa, Alexandru G. Niculescu – Bucharest, Svetlana Slapšak – Ljubljana, Robert Sullivan – Notre Dame USA, Michael Werner – Paris), four Junior Fellows (Mónika Baár – Budapest, Daniel Baric – Paris, Ottó Gecser – Budapest, Balázs Trencsényi – Budapest) and four Budapest scholars (Tamás Hofer, György Karsai, Éva Kocziszky, Zsigmond Ritoók – Associate Fellows).

Both projects will cooperate within the framework of regular weekly seminars for the discussion of participants' research results. In addition, between February and June 2005 a series of workshops and conferences will support their work with the involvement of internationally recognized experts. (For more information visit www.colbud.hu/mult_ant.)

"We, The People" – Visions of National Peculiarity and Political Modernities in The "Europe of Small Nations"

Fellowship Programme, November 2004 – December 2005 in co-operation with the Centre for Advanced Study, Sofia, Bulgaria, Supported by the Stability Pact of the German Foreign Ministry

The major purpose of this project is to excavate, W put together and compare various texts crucial for a range of European national traditions of political and social thought, which had been left out of the "core" European canon since the age of the Enlightenment. It seeks to "put on the map" intellectual traditions of those "small nations"

which were in many ways important parts of the European circulation of ideas, but whose 19th and 20th century history of political and social thought remained outside of the mainstream of scholarly thematisation. For more information visit www.cas.bg/obj/view.php?o=4&i=0&id=8.

CB Fellows working on this project include Calin Cotoi, Kinga-Koretta Sata, and Levente Szabó.

EU Projects:

ECAgents: (Embodied and Communicating Agents), with the Hungarian team headed by Permanent Fellow Eörs Szathmáry

The project is a winning FP6 Project awarded by the European Commission to a consortium including Collegium Budapest and 9 other partners. The relevant research provides better understanding of the role of communication in collections of embodied and situated agents using the tools of complex systems science and computer science. The objective is to identify design principles, algorithms and mechanisms for new information system technologies based on ECAgents that can extend the functionality of existing technological artefacts (robots, mobile phones, WI-FI computers, bio-molecular devices, etc.), and can lead to the development of new artefacts exploiting the characteristics of ECAgents. The expected breakthrough in IT and the development of new applications include new embodied and communicating devices that, like natural organisms, will be able to cooperate and coordinate with other devices. Examples: mobile robots, simpler sensor-equipped devices communicating through wireless connections. The project might lead to the development of autonomous intelligent robots, robot-like physical artefacts that communicate with world

and with human beings; human beings with wireless devices and smart objects that interact with one another; and technologies related to the semantic web. Currently, there are three projects running in Collegium Budapest's ECAgents group, each targeting subsequent levels of systems necessary for communication. The project 'Prerequisites of Communication' aims at setting up an evolutionary scenario for the origin of language by performing an analysis on a collection of criteria established upon historical and biological constraints, and on the recent results of artificial life research and game theory. The target of the second project is to understand the neural bases of rule learning by means of a statistical learning paradigm. Finally, in the third project an evolutionary neurogenetic algorithm is being developed through which constraints established by the evolutionary scenario can be applied to the evolution of neural networks performing calculations necessary for language production. For more details of this research project please visit www.ecagents.org.

CB Fellows working on the project: Péter Ittész (Biology), Máté Lengyel (Biology), Gergő Orbán (Physics), Szabolcs Számadó (Biology), Zoltán Szatmáry (Computer Science), Eörs Szathmáry (Biology)

EVERGROW: (Ever-Growing Global Scale-Free Networks, their Provisioning, Repair and Unique Functions), with the Hungarian team headed by Collegium Budapest Fellow Gábor Vattay.

This project is also a winning FP6 project including 27 partners, apart from Collegium Budapest. The vision of EVERGROW is to invent methods and systems, and build infrastructure for the measurement, modelling and analysis of network (Internet) traffic, topology and logical structure, so that one can start now to address the opportunities and problems presented by the Internet in 2025. In the subproject called ETOMIC, run by the

Evergrow group at Collegium Budapest, researchers build a measurement infrastructure that is able to carry out high temporal resolution (~10 nano second), globally synchronized, active measurements in Europe between the measurement boxes. It will provide them with a high resolution, spatially extended dynamic picture of fast changes in the network traffic. This can open up the possibility to new kind of network tomography, where cross correlation

between measurement flows can be measured on a fine timescale and the internal state of the network, far away from the ends of the network, where the measurement devices are located, can be reconstructed and its time behavior can be studied, and the data can be

analyzed with methods developed in the complexity science literature. For more details of the Evergrow and the EtoMic projects please visit the following websites:

www.evergrow.org and www.etomic.org.

CB Fellows working on the project: István Csabai (Physics), Péter Hága (Internet Physics-junior), Gábor Simon (Internet Physics-junior), József Stéger (Internet Physics-junior), Gábor Vattay (Physics)

Astrobiology of Mars, a European Space Agency (ESA) funded project also headed by Eörs Szathmáry.

The objective of the Mars Astrobiology Group is the morphological and dynamical analysis of the Dark Dune Spots (DDSs) on planet Mars in order to elucidate to what extent they could be potential/actual habitats for Martian life forms. Dark dune spots (DDSs) are annually recurring peculiar features on some dark dunes (DDs) of Mars, between the South Pole and -50 degrees latitude. No convincing physico-chemical explanation is available that would be consistent with all the observed features. In contrast, they can be explained by a biological hypothesis resting on the idea that DDSs result from the lifecycle of hypothetical Mars Surface Organisms (MSOs). The central species there would grow and reproduce by photosynthesis. The multi-layered ice sheet on the dunes is an essential component of the explanation: until it persists (till midsummer each year), it could

provide excellent shield from UV, cold, and desiccation. In the collaborative work of Spanish, Hungarian and Swiss groups the aim is to carry out a much more systematic investigation of the DDS phenomenon, integrating data from observations, experimental and computer simulations. Part of the project is to investigate the mineralogical composition, the radiation balance (in the UV, the visible and the infrared domains) of the DDs. A thorough search is planned to look for possibly similar phenomena on Earth in certain candidate regions (such as the Siberian permafrost and Antarctica). A comparative study on similar types of metabolism here will be carried out. Aspects of DDS dynamics will be simulated in Mars chamber experiments. For more information on this project please visit <http://www.colbud.hu/esa>.

CB Fellows working on this project: András Horváth (Budapest Planetarium), Szaniszló Bérczi (Eötvös University), Tibor Gánti (emeritus), Tamás Pócs (emeritus, Esterházy College, Eger), Albert Gesztes (Budapest Planetarium)
Junior resident fellows: Ákos Kereszturi, András Sík
Visiting fellows: Susanna Manrubia (Centre for Astrobiology, Madrid), Christoph Scheidegger (WSL, Switzerland)