

BSCS Systems Neuroscience

for undergraduates

A STUDY ABROAD SUMMER PROGRAM IN ENGLISH FOR US AND INTERNATIONAL STUDENTS

Program Information and Call for Students
last updated the 15th Jan 2019, replacing all earlier versions.



Semmelweis University, Department of Anatomy

Program Home Page: <http://sysneuro-semester.org>

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Postal Address:	BSCS, Department of Ethology Eötvös University, Budapest, Hungary H-1117 Budapest, Pazmany Peter s. 1. Tel./FAX: +36 1 372 2924
US Coordinator:	<i>Ms. Judit Hegedüs</i> , MSc, Kalamazoo, MI, jhegedus@kzoo.edu
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ADVISORY BOARD

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Anna W. Roe	Oregon Health and Science University Portland, OR, USA; Zhejiang University Interdisciplinary Institute of Neuroscience and Technology, Hangzhou, China

ABOUT BSCS SysNeuro

BSCS SysNeuro is a new program offered by the Budapest Semester in Cognitive Science (BSCS) from 2015 on. BSCS is a study abroad school established in 2003, featuring a unique combination of academic excellence and rich cultural traditions.

BSCS was established as an undergraduate program for US and other foreign students offering a study abroad semester in the cognitive sciences in the Fall semester. BSCS SysNeuro has been started as a Summer semester in 2015.

FRAMEWORK

OBJECTIVES AND SCOPE

The BSCS Systems Neuroscience is an undergraduate study abroad program for students from the US and other countries aimed at broadening their understanding about the brain as a complex system. Lecturers of the Program are distinguished experts with noteworthy international research and teaching experience.

AFFILIATION WITH SEMMELWEIS UNIVERSITY

The Program is run in Hungary by the Hungarian Cognitive Science Association (www.makog.hu) and on the US side by BSCS-US LLC, Kalamazoo, MI and is affiliated with the Semmelweis University, Budapest. Academic supervision is provided by the Department of Anatomy, Histology and Embryology, Semmelweis University that also assumes responsibility (<http://semmelweis.hu/anatomia/en>).

THE UNIVERSITY

Semmelweis University is Hungary's leading medical university hosting numerous foreign language students in addition to Hungarians. Today, the University has more than 10,000 students including almost 20% from many countries worldwide. The Anatomy Department, which is one of the oldest, was founded at the second half of the eighteenth century and is located in a historic building in the downtown. The University's home page provides further details and background information, please visit <http://semmelweis.hu/english>.

HIGHLIGHTS OF BENEFITS

- **STUDY ABROAD AND EXPLORE EUROPE - AT A REASONABLE COST**

The key benefit provided by this Program to students is the opportunity to complete a summer semester abroad with a high level academic content that is recognized by the sending institution and at the same time requires a significantly more modest financial commitment than a semester undertaken in the US or in Western Europe, due to the lower living costs incurred in Budapest.

- **CULTURAL EXPERIENCE**

The Program provides a very important additional benefit for students, namely the opportunity to experience life in Hungary and in the Central and Eastern European region in a safe and assisted way. Students and faculty have a very diverse background, and a significant number of them come from Eastern Europe.

- **GATEWAY TO VIENNA, PRAGUE, AND THE REST OF EUROPE**

Hungary is a member of the European Union. Budapest is located just 250 kilometers (155 miles) away from Vienna and 300 kilometers (185 miles) from Prague, making these wonderful cities, along with many other European destinations easily accessible and perfectly suitable for a long weekend getaway. BSCS SysNeuro provides assistance to students who wish to organize such visits within Europe during their stay.

CALL FOR STUDENTS

The 2019 Call for Students is available at the website. The deadline for applications in 2019 is March 15 (for further details see "How to Apply"). Interested students may wish to contact the US Coordinator (jhegedus@kzoo.edu) and all applications should be submitted to bscs@bscs-us.org. The interested are also invited to visit the BSCS SysNeuro Web page <http://sysneuro-semester.org> for additional information.

BASIC INFORMATION

OBJECTIVES

The Program envisages providing:

- an introduction to understand the brain at an undergraduate level;
- safe and assisted experience of living in a European environment;
- an opportunity to gain insight into Hungarian and European culture and history, as well as to acquire an optional knowledge of the Hungarian language.

LANGUAGE

All courses are taught and all communication is conducted in English.

TUITION FEE

The Program operates on agreements with various Colleges and provides different services as per agreement. The tuition fee for 2019 is USD 5,300 (see also Stipends).

STIPENDS

For students whose social conditions do not permit them to pay a full tuition fee as well as for students from eligible countries, a stipend (from the practical point of view: a partial waiver on the tuition fee) is available upon request. Stipends are awarded by the Board of Directors on a case-by-case basis. Together with the request for a stipend, a proof of parental income and any further financial aid obtained is required. Students should inquire at their local universities and organizations for additional support.

WHAT IS INCLUDED IN THE TUITION AND WHAT IS NOT

The tuition fee includes:

- accommodation
- orientation day
- courses and course handouts as described separately
- high speed Internet access at dorm and campus (quality varies)
- Hungarian language course during the Semester
- cultural courses and other cultural programs including a guided tour in Budapest

The tuition fee does not include:

- meals
- visa and foreigner registration, passports, photographs, required health insurance
- travel from home to Budapest and back
- travels within Europe
- health insurance and other insurances
- local transportation costs
- telephone bills, medical costs, damage reparations, etc.

Based on individual agreements with selected sending universities and colleges, additional special packages of service can be provided to students upon request.

ACCOMMODATION

The accommodation offered by BSCS SysNeuro is, if possible in one of the regular student dormitories of Eötvös University - Hungary's leading science and Liberal Arts University - simple rooms in good condition. Dorm availability changes annually and dorm allocations may shift. Room choice is limited; student needs are satisfied on a "first come first served" basis.

NO-REFUND POLICY

The Program entails fixed expenditures (including lecturers' honoraria, costs of excursions etc.) and is fully tuition-driven. As a general practice therefore, we apply a strict no-refund policy vis-à-vis all officially enrolled students.

ACADEMIC INFORMATION

STUDENT STATUS

The student card is a useful asset in buying museum tickets.

FACULTY AND COURSES

The BSCS SysNeuro Faculty and courses offered are detailed separately.

TEACHING AND RESOURCES

Students are not required to purchase textbooks for the courses (with the exception of the language courses). All courses are based on the delivered lectures. Teaching material is developed (or, in the case of readings, collected) by the faculty and distributed to the students at no additional costs. Classroom teaching is supplemented by mandatory reading materials and by further assignments (such as Internet or library-based student research) outside of class hours.

Resources available to students include a library (at CEU, the Central European University, www.ceu.hu) with a number of relevant scientific publications and reviews in English, as well as a few PCs with permanent Internet access. Internet is also available in the buildings and free WiFi is accessible in the majority of University campus locations including the dorm (quality varies).

MOODLE E-LEARNING PLATFORM

The main vehicle of structured course communication is the BSCS Moodle e-learning platform at <http://moodle.bscs-us.org> (login provided to BSCS students and teachers).

CREDITS TRANSFER AND TRANSCRIPT

Transcript: Every BSCS student properly attending the classes as above, and also meeting the requirements of each examination, receives a Certificate from Semmelweis University demonstrating the duration and other specifics of the courses attended, as well as the grades obtained. US compatible official transcripts of Semmelweis University are also provided for those eligible for the Certificate. Transcripts will be mailed to the sending US colleges/universities in a sealed envelope.

Credits: Students' home universities typically require the achievement of credits as result of a study abroad stay. In the case of doubt, the acknowledgement of earned credits by the students' home university must be negotiated in the application phase. BSCS SysNeuro's own credit system is fully compatible with the credit system of Semmelweis University, which strictly follows the ECTS (European Credit Transfer System). For official ECTS information, please consult:

http://ec.europa.eu/dgs/education_culture/publ/pdf/ects/en.pdf

BSCS Systems Neuroscience offers 18 ECTS credits as follows: neuroscience classes: 7x2=14 and lab practices: 4. Each course consist of 20 contact hours, which are equivalent to 1.4 US semester hours (for 14-week US semesters) and this allows a clear conversion of the transcripts to US credits.

QUALITY CONTROL

The main quality control is exercised by the Board of Directors and by Department of Anatomy, Histology and Embryology, Semmelweis University. A further component of surveillance is exercised through the US Director and the students' home institutions. Additional on-site audits are always welcome by the Board.

EXAMINATIONS

The main form of assessment is a written or oral examination at the end of each course. Students receive a grade for each examination as well as a final grade (based on the average of the grades obtained) in the Certificate.

Written examinations take the form of a test or a short essay. An oral examination is conducted in the form of a dialogue between the teacher and a student, where, as a general rule, the student may take time to prepare his or her answers. Oral examinations at Hungarian universities are open to the public (practically: to fellow students) thus ensuring transparency.

Students are entitled to have ONE repeated exam, the time of which will be communicated by the BSCS staff.

GRADES

In Hungary, grades are weighted on a scale of five, ranging from 1 to 5, with 5 indicating the highest and 1 the lowest grade: 5 stands for “excellent”, 4 for “good”, 3 for “mediocre”, 2 for “satisfactory” and 1 “unsatisfactory/fail”. (This directly translates to an A to F scale.)

Eventual equivalence issues arising between the various national grading /credit systems and the Hungarian should be consulted with the Student Advisor and the Study Abroad Office of the student’s home institution and with the Program Chair of BSCS SysNeuro. In most cases the equivalence between the Hungarian and various other grading systems can be easily established.

ELIGIBILITY

The Program is open to undergraduate students of all disciplines with a sufficient personal maturity to adapt to a new environment and a foreign society. Consequently, any undergraduate student of a University or College of good standing, who by the time of the start of the Budapest Semester has completed the first two semesters of his/her studies, is eligible to enroll in the Program. Students from any academic background are welcome, however, familiarity with one or more of the following disciplines is likely most conducive to completing a successful semester in the framework of BSCS SysNeuro: neuroscience, biology, computer science and mathematics; natural sciences, engineering, psychology. Students from other disciplines should contact the BSCS SysNeuro Program Chair before application time in order to discuss the compatibility of their academic background and expected benefits to be derived from completing the Program.

The selection of students takes place on a competitive basis, with a record of previous academic results constituting the sole selection criterion. The general minimum entry requirement at application time is a US grade point average (GPA) of 3.0. Students with a GPA lower than 3.0 should inquire with BSCS SysNeuro Directors on the possibility of a waiver.

HOW TO APPLY

Form sheets for application are available at <http://www.sysneuro-semester.org/schedule-application>. Applicants are requested to supply a recommendation from appropriate faculty. Application deadline for 2019 is March 15. Applications should be sent in email to: bscs@bscs-us.org.

“Early bird” applications:

Applications arriving before January 15, 2019 are entitled to a 10% reduction in the tuition fee.

Applications sent via e-mail must be accompanied by a signed hard copy of the signature page (included in the downloadable application form) sent by airmail or surface mail to:

László Négyessy, Ph.D.
Department of Computational Sciences, WIGNER RCP,
KFKI Campus, Building 13, Floor 1, Room 6.
Konkoly-Thege M. út 29-33,
Budapest,
H-1121, Hungary

FOR MORE INFORMATION

For any further information on the Program, kindly contact the US Coordinator, Ms. Judit Hegedus (jhegedus@kzoo.edu) or the US Director, Prof. John Milton (JMilton@kecksci.claremont.edu).

COURSE INFORMATION

SYSTEMS NEUROSCIENCE

The Systems Neuroscience program follows the approach of systems theory in understanding the brain. The aim is to provide students a view of the brain as a whole via unfolding, at least in part, its immense complexity. This is a major challenge of all time, but the right answer should be one that can integrate actual knowledge. As we are in the fortunate period of time when high performance tools (both hardware and software) and large datasets are getting more and more available, systems thinking is inevitable in brain research. Successful completion of BSCS SysNeuro enables students to pursue graduate studies in the field of neurosciences especially in theoretical or computational neuroscience in a later stage of their academic career.

PROGRAM START/END DATES

June 10th - Aug 2nd, 2019

June 10 - Program begins with Opening and Orientation

COURSES OFFERED IN THE FRAME OF BSCS SysNeuro

Every course is designed for the non-specialist student who has little or no prior familiarity with the given subject but is equipped with curiosity and is adequately intelligent to absorb new concepts, methods, and modes of thought.

The BSCS SysNeuro Professors have an extended experience in handling various student backgrounds, interests, and levels of competence within a single course. BSCS courses have been designed and Professors have been selected to fit these criteria without compromising academic quality.

BLOCK COURSES SYSTEM

BSCS SysNeuro is based on a block courses system. A block course means a one-week (i.e. 5 days), 5 hours per day, intensive course of 20 contact hours altogether (includes 4 days of teaching, and consultation as well as exam on the fifth). All block courses come in the form of lectures (occasionally accompanied with independent student work). Additional lab visits organized at the Professors' labs complement the lectures.

Each BSCS SysNeuro course is a block course except the optional Hungarian Language Class held in the afternoon once in a week. To a limited extent blocks may move within the block course system without prior warning.

Block courses are not uncommon at Hungarian Universities and are generally welcomed by the students because of their highly concentrated character. A block course ends with an assessment in the form of typically a written or oral examination.

STRUCTURE OF THE COURSES

COURSE SCHEDULE

Classes are Monday to Friday, 9:00 – 13:30. Location is at the Department of Anatomy, Histology and Embryology, Semmelweis University. Map is available at <http://www.sysneuro-semester.org/location-links>. Breaks are from 10:30 to 10:45 and from 12:15 to 12:45. Each week covers one course, with examination on Friday.

- **ORIENTATION DAY (1. DAY)** Required, 0 (zero) credit. Personal introduction, introduction to Hungary and Budapest, to the University and its facilities, to the specifics of the local educational system, how BSCS SysNeuro works, timetables, etc.
- **REGULAR COURSES (2-8. WEEK)** All regular courses are required. They are 2 ECTS credits worth each, equivalent to 1.4 US standard semester hours (see CREDITS TRANSFER AND TRANSCRIPT above, for US equivalence). The table (next page) summarizes regular course information and their lecturers for 2018 (the 2019 credits are planned to be identical). Additional 4 credits are given for practical courses during lab visits.

COURSES IN 2018 (COURSES IN 2019 PLANNED IDENTICAL)

<i>Schedule 2018</i>	<i>Course title</i>	<i>Lecturer</i>	<i>Contact Hrs</i>	<i>(8 weeks) semester hours</i>
June 11	Orientation day	Ms. Ildikó Pieczka and Dr. Emese Pálfi	3	n.a.
June 12-15	<i>Central European Culture</i>	Eszter Greskovics Art Historian at Artpool Art Research Center, Budapest	20	1.4
June 18-22	<i>Systems Biology: Neuronal genomics and proteomics</i>	Prof. Gábor Juhász PhD, DSc Laboratory of Proteomics, Institute of Biology, Eötvös Loránd University, Budapest,	20	1.4
June 25-29	<i>Neocortex: from structure to function</i>	László Négyessy , PhD Complex Systems and Computational Neuroscience Group, Wigner RCP, HAS and Department of Anatomy, Histology and Embryology, Semmelweis University, Budapest	20	1.4
July 02-06	<i>Computational Models in Systems Neuroscience</i>	Mihály Bányai , PhD Wigner RCP, Computational Systems Neuroscience Lab, Budapest	20	1.4
July 09-13	<i>Neurodynamics: from single neurons to motifs</i>	Prof. John Milton , MD, PhD Claremont McKenna College, CA, USA	20	1.4
July 16-20	<i>Learning and Navigation</i>	Zoltán Somogyvári , PhD Complex Systems and Computational Neuroscience Group, Wigner RCP, Hungarian Academy of Sciences (HAS), Budapest	20	1.4
July 23-24	<i>Brain imaging: from normal to pathological</i>	Lajos Kozák , MD, PhD MR Research Center, Semmelweis University, Budapest	10	0.7
July 25-26 (exam July 27)	<i>Neural rhythms: normal and pathological</i>	Dániel Fabó , MD, PhD Department of Functional Neurosurgery and Department of Epilepsy, National Institute of Clinical Neuroscience, Budapest	10	0.7
July 30- Aug. 03	<i>Statistics of the Brain</i>	Gergő Orbán , PhD Computational Systems Neuroscience Lab, Wigner RCP, Hungarian Academy of Sciences, Budapest	20	1,4
Total	9 courses		163	11.2

ADDITIONAL SPECIAL COURSES INCLUDED IN THE PROGRAM

Hungarian Language NO credits, 1.4 semester hour elective

Course summaries are provided at <http://www.sysneuro-semester.org/program-overview>

TEACHING FACULTY

ESZTER GRESKOVICS

Archivist, art historian at Artpool Art Research Center, Budapest

Expert in Central European Culture

Web: <https://www.linkedin.com/in/eszter-greskovics-820a7587/?originalSubdomain=hu>

PROFESSOR GÁBOR JUHÁSZ

Laboratory of Proteomics, Institute of Biology, Eötvös Loránd University, Budapest

Applies molecular biology and neurophysiology to study brain function and disease

Web: <https://www.linkedin.com/in/gabor-juhasz-7195a68>

Dr LÁSZLÓ NÉGYESSY

Wigner RCP, Complex Systems and Computational Neuroscience Group, Budapest and

Semmelweis University, Department of Anatomy, Histology and Embryology, Budapest

Studies the modular and mesoscale organization of cortical networks by experimental and theoretical tools.

Web: <http://cneuro.rmki.kfki.hu/people/negyessy>

PROFESSOR JOHN MILTON

Claremont McKenna College, CA, USA

Works at the interface between mathematics, neuroscience and neurology

Web: <https://www.cmc.edu/academic/faculty/profile/john-milton>

Dr MIHÁLY BÁNYAI

Wigner RCP, Computational Systems Neuroscience Lab, Budapest

His current research involves modelling top-down effects in visual perception using hierarchical probabilistic models of vision, and testing them on electrophysiological recordings from behaving monkeys.

Web: <http://golab.wigner.mta.hu/people/mihaly-banyai>

Dr ZOLTÁN SOMOGYVÁRI

Wigner RCP, Complex Systems and Computational Neuroscience Group, Budapest

Develops mathematical tools for novel data analysis techniques including single cell current source densities and dynamic causal interaction.

Web: <http://cneuro.rmki.kfki.hu/people/soma>

Dr LAJOS KOZÁK

MR Research Center, Semmelweis University, Budapest

Uses MRI and fMRI to study the structure and function of normal and diseased brain.

Web: https://www.researchgate.net/profile/Lajos_Kozak

Dr DÁNIEL FABÓ

Department of Functional Neurosurgery and Department of Epilepsy, National Institute of Clinical Neuroscience, Budapest

Studies epilepsy by using invasive and noninvasive electrophysiology in human patients.

Web: https://www.researchgate.net/profile/Daniel_Fabo

Dr GERGŐ ORBÁN

Wigner RCP, Computational Systems Neuroscience Lab, Budapest

Applies probabilistic Bayesian models to understand both high-level cognitive and low-level neuronal computation.

Web: <http://golab.wigner.mta.hu/people/gergo-orban>

RESIDENT SECRETARY

BSCS SysNeuro employs a Resident Secretary who is responsible for all administrative matters and all contacts during the students' stay in Hungary and while they are studying in the BSCS SysNeuro. She is also the main contact for the parents (and families) of the students. The Resident Secretary is fluent in English.

The Resident Secretary has office hours every day 13:30 – 14:30 (office at the Dept. Anatomy) but she is available at all times, 24/7 in case of emergency during the whole Semester of BSCS SysNeuro. Please avoid calling the Resident Secretary outside the Semester. In all off-Semester matters consult the US Coordinator or the Program Directors. The name, email, and cell phone number of the Resident Secretary is:

Ms. Éva Valkó, PhD student in mathematics, Eötvös University, Budapest, Hungary
+36 70 542 8866 (cell phone), vyiiccaa@gmail.com

Dr Emese Pálfi, Postdoctoral Fellow, Department of Anatomy, Histology and Embryology, Semmelweis University, Budapest, Hungary
+36 70 395 4215, palfi.emese@gmail.com

VISA AND REGISTRATION INFORMATION

Currently all US citizens planning to stay less than 90 days in Hungary are NOT required to have a visa or a residence permit to Hungary. More information is available at: <https://washington.mfa.gov.hu/eng>. Non-US citizens outside of Europe may need visa to visit Hungary even for short term.

All foreign students and all foreigners visiting Hungary for more than 90 days must register with the Office of Immigration and Nationality in Budapest (<http://www.bmbah.hu/>). Accepted BSCS SysNeuro students will be informed about the necessary documents and will be assisted when in Budapest. Having a Visa does not speed up or change the registration process in any way.

BSCS SysNeuro staff provides full assistance with the registration in Budapest. Registration currently involves a fee of ca. 75 USD, to be paid up front.

For general information about traveling and staying in Hungary, US students may wish to consult the Hungarian Embassy in the US:

Embassy of Hungary
Department of Consular Affairs
3910 Shoemaker St., NW
Washington, DC 20008
(202)-362-6730
<https://washington.mfa.gov.hu/eng>

ARRIVAL IN BUDAPEST

Program representatives will meet students upon their arrival (airport or rail station), provided that come in pre-arranged times (usually this means certain hours of the weekend before program beginning). Please note that this is a general policy and BSCS SysNeuro cannot, as a general rule, pick up students arriving at random times, except in emergency or otherwise unexpected situations.

It is vital that the organizers in Budapest are informed about students' travel well ahead of time. Students are requested to forward their travel itinerary to the Resident Secretary as soon as they become available.

Should a student's arrival in Budapest be delayed or affected by any unforeseen circumstance, Dr Emese Pálfi, +36 70 395 4215, palfi.emese@gmail.com or Ms. Éva Valkó, +36 70 542 8866, vyiiccaa@gmail.com needs to be contacted.

ASPECTS OF DAILY LIFE

THINGS TO BRING ALONG

Students should not forget their passports, air tickets, at least one major credit or debit card, and a sufficient amount of money in cash and/or travelers checks to cover immediate expenses upon arrival. It is advised that students bring along their laptops.

It is important that students bring an ample supply of any medicine they frequently use, as well as shoes and clothes that are appropriate for all seasons. Dormitory rooms come completely furnished, and are supplied with bed linen, kitchenware, etc. and further necessary items can easily be found in shops.

The dorm is equipped with washing machines. Thick items, such as sweatshirts, take two to three days to air dry as dryers are rarely used in Hungary. Towels and other personal hygiene items should be arranged for by the students themselves. While traveling, all forms of ID, cash, and a week's supply of any vital medication should be kept in the student's carry-on luggage. Although unlikely, checked-in baggage might be placed on a wrong plane or fail to make the connecting flight. Before check-in all luggage should be equipped with a label featuring the student's final destination, as follows:

BSCS Systems Neuroscience
Eötvös Collegium
H-1118 Budapest
Ménesi út 11-13
Hungary

ELECTRICITY

The voltage used in continental Europe is 220 Volts. Also the plug is different. This renders most American appliances useless unless they are convertible, battery-operated or you have an adapter. In the US, European adapters can be bought at every major electricity shop. Note that the outlet geometry is also different. Outlet adapters also exist that switch between the different systems and are available in the US for a few dollars. Today most general use electronic devices (such as laptops, portable CD players etc.) come equipped with a built-in conversion system between 110/220 Volts (but not between the mechanical outlet geometries). In such a case all you need is the mechanical adapter. In case of doubt, students should check their devices and consult a member of the Program staff in advance.

CLIMATE

Climate in Budapest is similar to that of other cities with continental weather at similar latitude in Europe (e.g. Paris, Vienna, or Munich). It can be quite windy near the river Danube. It should be noted that in Europe, temperature is measured in Centigrades. Zero Centigrade is 32 Fahrenheit, and every 10-Centigrade difference makes another 18 Fahrenheit (i.e. 50 Fahrenheit is 10 Centigrade, 68 F is 20 C, etc).

CURRENCY

Hungary is a member of the European Union, but not in the EURO currency zone. The Hungarian currency is called Hungarian Forint, or Forint (Ft) for short. As a general rule, students should not carry much Forint in cash, as there are many ATM's in the city (a few of them directly on the Campus). ATMs also tend to give a good exchange rate. You can exchange dollars or travelers checks to Forints at the airport, rail station, or any of the hotels or banks in Budapest. There remains a currency black market in Hungary, and there is also a good deal of counterfeit currency in circulation; students are strongly advised not to trade currency with strangers.

Major international credit cards (in particular, MasterCard and Visa) are accepted at many places, including most restaurants, bookshops, and food stores. Further information is found in the welcome package.

Personal checks, cashier checks, money orders, etc., cannot be readily exchanged and are in limited use in Hungary. International banking is quite slow. Although you may deposit a personal check at some banks, it may take several months (!) until the check is cleared. It is a good idea to bring some personal checks along in case you have to mail away for something like a GRE registration. It is not a good idea to exchange all your money at once. The bank will convert Forints back to USD but will charge you again for the transaction. Exchange rates vary day-to-day reflecting changes in the international monetary market.

GENERAL GUIDES

Good information pages about student life in Budapest:

<http://budapeststudent.com/>

<http://www.lonelyplanet.com/thorntree/thread.jspa?threadID=1844003>

(note that links may change often and you may wish to consult search engines instead).

Further information, such as how to buy a monthly student ticket, how to get a cell phone, etc., are provided during Orientation Day which is compulsory for Program participants or found in the welcome package. A general tourist site is http://budapestinfo.hu/home_en.html.

ENGLISH ON THE STREET

While not too many Hungarians speak foreign languages, it is possible to get by with English. One is likely to find at least one English-speaking person almost everywhere. A handful of basic Hungarian words will help out in most real-life situations. People tend to be co-operative and friendly towards foreigners.

MEALS

BSCS SysNeuro students should rely on the choice of available shops and restaurants in this respect. Besides, the Dormitory offers a student kitchen in the common area. The Orientation Day gives detailed information about on-campus student restaurants, nearby supermarkets, food stores, etc.

Special needs such as vegetarian, cholesterol-free, or religiously approved (Kosher, Halal, etc.) food is increasingly common in Hungary and should be obtained relatively easily at specialty places (please inquire). Living costs are relatively low in Hungary by most Western standards. For comparison, an average daily shopping may cost 2500 Forint (ca. 9 USD), and dinner in a reasonable city restaurant starts in the same range. A complete lunch in a student restaurant costs ca. 800 Ft (ca. 3 USD).

PUBLIC TRANSPORTATION

The public transportation system in Budapest is safe, cheap, and very well spread throughout the city. The student package contains necessary maps and descriptions. Tickets are valid for all public transport vehicles: subway, buses, trams, electric street cars (“trolley bus”).

For accessing any city destination from the Airport, the best value for money is the “Airport Minibus”, which operates as a multi-customer taxi, and costs ca. 6000 Forints (ca. 22 USD). Also a shuttle no. 100E is in operation between the city center and the airport (<https://bkk.hu/en/airport-shuttle/>) for less than 4 USD.

GENERAL LIVING COSTS DURING THE PROGRAM

Using the above data and related estimates, as well as experiences of our students, non-binding estimates (“educated guesses”) for the general living costs during the whole semester are:

Food: 2,000 USD
 Phone: 300 USD
 Cultural programs: 350 USD
 Personal costs including local transportation: 450 USD
 (International travels not included).

Note that all these costs can vary greatly due to different backgrounds and needs. To compare, an average Hungarian student lives on c.a. 50,000 HUF/month, i.e. ca. 1,000 USD per semester.

MAIL AND PHONE

To call a telephone number in Budapest from abroad, use international call prefixes. From the United States, you prefix the number with 011-36-1. Dialing 011 summons the international switchboard (from ATT), whereas 36 is the country code for Hungary, and 1 is the city code for Budapest.

Notice the difference in time zones. Budapest has Central European Time (CET, i.e. GMT+1), which is 6 hours ahead of Eastern Daylight Time (New York.). For example, when it is noon in New York and 9 a.m. in San Francisco, it is 6 p.m. in Hungary. At 6 p.m. in New York, it is midnight in Budapest.

To make a call from Budapest, you need to dial 00 for the international switchboard, then the country code (which is 1 for the US and Canada) followed by the area code and the telephone number without pauses.

Your mailing address in Budapest (for letters, packages or FedEx, etc.) will be:

Name_of_Student, room #
 Eötvös Collegium
 H-1118 Budapest
 Ménesi út 11-13

Hungary

SAFETY AND SECURITY

By most standards, Budapest is a safe city, except for a few distinct areas and at certain hours. The most typical street crime is theft at a crowded place, and fraud by black market dealers. Common sense is usually sufficient to avoid or to solve such situations. Open threat or unprovoked violence towards strangers is very rare.

The student package (distributed upon arrival) contains Police phone numbers (English operator), as well as further information. The US Embassy home page in Hungary (<https://hu.usembassy.gov/embassy/budapest/>) explains the basics of safety in the city, together with the most typical criminal tricks (such as “fake police”, i.e. civilians playing police – bear in mind that real police ALWAYS wears a uniform and ALWAYS comes in 2) deployed against tourists and visitors on the street – most of the street tricks are highly international.

HEALTH AND CRISIS MANAGEMENT

In terms of public health and security, Hungary can be considered a highly safe country. Each BSCS student is required to hold a valid full health insurance that covers all accidents and usual medical treatments for the entire duration of their stay in the framework of the Program. Students arriving without proper health and accident insurance are required to obtain one at their own cost. If necessary, the Resident Secretary provides help and advice in this matter. In case of emergency or any crisis situation, the Resident Secretary or one of the emergency services provided below should be contacted.

INTERNET ACCESS

Campus buildings support wireless connections (standard Wi-Fi). Quality varies. Many students use their own laptops in Budapest and BSCS SysNeuro students are encouraged to do the same.

STUDENTS WITH AN LBMTQ+ BACKGROUND

We encourage students with LBMTQ+ and other backgrounds. The program is supportive of their needs and the University tends to be a safe and tolerant environment. Hungary is a moderately open and tolerant country. Most Hungarians tend also to believe that private matters should in general be kept private, i.e. activism (of any kind) is seldom endorsed.

MENTAL HEALTH

Studying abroad is a challenge for most students. Many of them are a continent away from family for the first time in their life and experience this as a difficulty. Maintaining solid mental health during the study abroad stay is an important and sometimes difficult task. We are fully aware of these difficulties and sympathetic towards the students struggling with them. A student group called “Kortárs Segítő Csoport” (Peer Counseling Group) is a voluntary helper group operated by psychology students at ELTE. They provide free and semi-professional help also in English, and are a useful stepping stone with strong contacts to professional or even medical helpers if necessary. Their English web page is at <http://kortars.elte.hu/english>.

SPORTS FACILITIES

Students should use public facilities. Please consult the Chair or the Resident Secretary for more details and advice. Budapest is a city which offers virtually all imaginable sports activities, from wall-climbing and skateboarding to paragliding and horse riding, most of them usually available at low to reasonable costs. Students are advised not to forget about their gears and licenses, etc.

EXCURSIONS AND CULTURAL PROGRAMS

The Central European Culture course will include a guided tour in Budapest. Individual trips can be arranged for during the weekends. Assistance in the organization of such trips is provided by BSCS SysNeuro staff. Based on individual agreements with selected Colleges and Universities further value-added services can be provided. Arrangements of this kind underway with a number of institutions and is open to every college and university.

Students are encouraged to organize programs on their own as they should be able to move about the city with ease after a comprehensive Orientation Day and the guided tour. Useful and informative websites exist in English, such as <http://funzine.hu/> and should prove to be very helpful to students.

BSCS SysNeuro staff is also happy to give advice in terms of do's and don'ts. Student dormitories close at 10 p.m., which puts a limit to independent student activity. Students who need personalized guidance to cultural programs or wish to be accompanied by locals should inquire at the Resident Secretary. Local Eötvös students who volunteer to assist foreign students can be easily found on prior notice.

DECENCY

Students are expected to conduct a decent student lifestyle. Resident BSCS SysNeuro staff monitors and helps extracurricular student activities in order to strictly keep this goal.

The University Campus is located in the downtown area of Budapest, a city of over 2 million inhabitants (2,5 million in the Metropolitan Area). It is important for students to be aware of their share of responsibility with regard to their behavior on Campus and in the country in general. Improper lifestyle, in particular with respect to the use of alcohol, drugs and delinquency of any kind cannot and shall not be tolerated. Every disciplinary offense will be reported to the student's home institution.

EMERGENCY

The most important emergency phone numbers within Hungary are the following (no prefix):

General Emergency number: 112

Ambulance: 104

Fire-fighters: 105

Police: 107

Domestic directory assistance: 198

International directory assistance: 199

Posting a telegraph over telephone: 192

Automobile club emergency service: 188

Drug Stop Telephone Hotline : (+36 80) 505 678

Appendix: a sample certificate

*Examination results**

No: _____

Courses	Results
Systems Biology: Neuronal genomics and proteomics	
Computational models in systems neuroscience	
Neurodynamics: from single neurons to motifs	
Neocortex: from structure to function	
Learning and Navigation	
Brain imaging: from normal to pathological	
Neural rhythms: normal and pathological	
Statistics of the brain	

Hungarian Language	
Central European culture	

* Explanation of grades:
5 = very good
4 = good
3 = fair
2 = pass
1 = fail

BSCS Systems Neuroscience

No: _____

This certificate has been issued to

born in the city/town/village of _____

in the country of _____

on _____ 19 _____

and who fulfilled his/her university obligations in the summer semester of

the academic year _____

at Semmelweis University, Department of Anatomy, Histology and Embryology, Budapest, Hungary.

Budapest, 20 _____

Program Director of BSCS

Dept. Director