

BUILDING CAPACITY Selobal learning



Association of International Educators

Undergraduate Research Abroad: Creating Global Opportunities







EURO Scholars European Undergradu



Session outline

✓ Introduction

- Why is undergraduate research in an international setting important for the student and scientific community? (Bessie Guerrant)
- Why and how does a North American institution stimulate their students to do undergraduate research abroad? (Kathleen Horn)
- Accommodating undergraduate research semester abroad at European institutions. (Usha Mohunlol)

✓ Q & A



Introduction

Bessie M. Guerrant Ed.Spec., Associate Director, The Office of Undergraduate Research at University of Kentucky

- Responsible for faculty/program development and undergraduate research assessment
- ✓ More than 20 years of experience in the field of Higher education

Kathleen Horn, Program Manager, Office of International Education at University of Denver

- Advises on DU Partner programs abroad and is the communications and outreach manager
- ✓ Lived abroad for almost 10 years in the Netherlands and France

Usha Mohunlol, Coordinator European Office EuroScholars Program based at Leiden University

- Supports the Executive Board and is the Higher Institutional Coordinator at Leiden University
- Almost 18 years of experience in the field of internationalization and international relations

International Educators

✓ Co-writer / co-editor of the article "Undergraduate Research in Study Abroad" NAF

http://euroscholars.eu/advisors/euroscholars-presentations-and-publications/

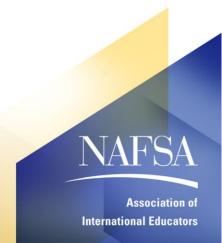


University of Kentucky

Bessie M. Guerrant Ed.Spec. Associate Director The Office of Undergraduate Research

bguer00@uky.edu http://www.uky.edu/academy/UGResearch





Undergraduate research

"...Undergraduate Research is an inquiry or investigation conducted by an undergraduate student that makes an original intellectual or creative contribution to the discipline."

Council on Undergraduate Research (CUR)

- Research methods, approaches, and outcomes vary with the field of study.
- Examples of fields of study: STEM, Humanities, Social Sciences, Business and Finance / Management, Law etc.





Article on the Significance of undergraduate research

(CUR Focus, F2009, volume 30, nr.1) *Perspective: Reasons Deans and Provosts (and Presidents) Should Value, Support, and Encourage Undergraduate Research* <u>http://www.cur.org/assets/1/7/fall09brakke.pdf</u>

"...Recent assessments of undergraduate research suggest that wellorganized programs can produce many benefits to students that include but also go beyond cognitive development. We know that students involved in undergraduate research gain self-confidence, are more likely to complete their undergraduate education, and are more likely to enter graduate school than are students who did not have a research experience ".





Trends on the home campus

Student and Faculty Research Partnerships

- ✓ Offices of Undergraduate Research for All Students and Majors
- Summer Research Opportunities for Honors and Top Students
- ✓ National Student/Faculty Databases like ScholarBridge

Research Abroad

- ✓ Finding Opportunities like EuroScholars
- ✓ Funding Support

Benefits for Students and the Institution

Enhance curriculum, integrate research & teaching missions facilitates student recruitment and retention





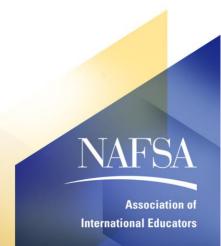
 \checkmark



Trends in undergraduate research abroad

- Proliferation of undergraduate research symposia, colloquia & poster fairs
- ✓ Special publications targeting undergraduate research
- ✓ New awards for undergraduate research abroad
- Targeted scholarship & grant funding
- Increasing program development targeting undergraduate research
- ✓ Specific recruitment & admissions strategies
- \checkmark Curriculum integration efforts in STEM disciplines
- ✓ Increasing "Feature Sessions" on undergraduate research
- ✓ Greater emphasis on faculty engagement







University of Denver

Kathleen Horn Program Manager Office of International Education

> kathleen.horn@du.edu www.du.edu/intl/abroad





University of Denver & Education Abroad

Students come to DU with the intention and understanding that they can and will study abroad, why is this?

- ✓ Cherrington Global Scholars (CGS) initiative
- ✓ Roughly 70% of our undergraduates study abroad each year
- DU Partner Programs, students can keep all DU institutional financial aid during term abroad
- ✓ INTZ 2501 and INTZ 2502 curriculum integration with international education
 - Becoming a Global Citizen In-person 2 credit class the quarter prior to going abroad
 - Being a Global Citizen On-line 1 credit class while students are abroad







International Educator

DU and Undergraduate Research

- ✓ DU Undergraduate Research Symposium
- ✓ Pre-med students
- ✓ Scholarships and PINs Grants
- ✓ Study Abroad Programs with Research Components:
 - ✓ Experiential Focus
 - ✓ Internships
 - ✓ Lab Research





University of Denver & Research Abroad

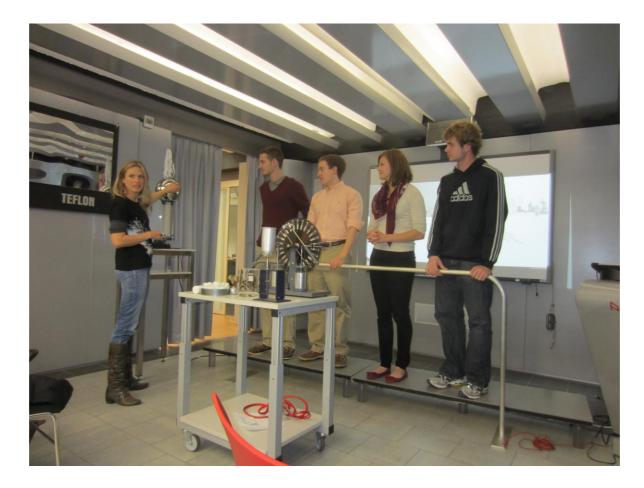
- ✓ DU faculty members and the Office of International Education (OIE) are very supportive:
 - Encourage students to take part in undergraduate research abroad.
 - > Help students to create their learning agreements.
- Screening students through our nomination process, ISA's application and EuroScholars' standards sets students up for success.
- ✓ DU sends between 3-5 students each year on the EuroScholars Program.
- Growing our returnee outreach program; DU Global Ambassadors, to encourage ongoing research and personal growth from their time abroad.





DU Honors students and Research

- Honors students can often use research done on the EuroScholars Program to count for their Honors Seminar, which is a requirement for being in the Honors program at DU.
- ✓ When DU students return from the EuroScholars Program they often use their research done abroad to tie into their Senior thesis.







DU Honors student: Kylie Van Hoesen University of Geneva



Title / Keyword	
Author	
Article Type	all

•	

	IJMS	•	Advanced
	all	•	Search
le	all	•	Clear



Open Access

IMPAC

FACTO

2.86



<u>Volume 17, Issue 5</u>

Article Versions

Abstract

Full-Text HTML

Full-Text PDF [885 KB]

Full-Text XML

Article Versions Notes

Related Info

Article Statistics

PubMed/Medline

Google Scholar

Order Reprints

More by Authors

[+] on DOAJ

[+] on Google Scholar

[+] on PubMed



Int. J. Mol. Sci. 2016, 17(5), 638; doi:10.3390/ijms17050638

Review

The Dark Side of Cell Fusion

Daniel Bastida-Ruiz [†], Kylie Van Hoesen [†] and Marie Cohen ^{*}

Journal

Section

Special Issu

Department of Gynecology Obstetrics, Faculty of Medicine, University of Geneva, Geneva 1211, Switzerland

* Correspondence: Tel.: +41-22-37-24-381

[†] These authors contributed equally to this work.

Academic Editor: Lajos Kemény

Received: 29 March 2016 / Accepted: 22 April 2016 / Published: 28 April 2016

Abstract: Cell fusion is a physiological cellular process essential for fertilization, viral entry, muscle differentiation and placental development, among others. In this review, we will highlight the different cancer cell-cell fusions and the advantages obtained by these fusions. We will specially focus on the acquisition of metastatic features by cancer cells after fusion with bone marrow-derived cells. The mechanism by which cancer cells fuse with other cells has been poorly studied thus far, but the presence in several cancer cells of syncytin, a trophoblastic fusogen, leads us to a cancer cell fusion mechanism similar to the one used by the trophoblasts. The mechanism by which cancer cells perform the cell fusion could be an interesting target for cancer therapy.

Keywords: cancer; cell fusion; metastasis; drug resistance; syncytin



http://www.mdpi.com/1422-0067/17/5/638/html





✓ Undergraduate STEM Academic Schedule

✓ Graduate Schools

✓ Research Abroad Marketing







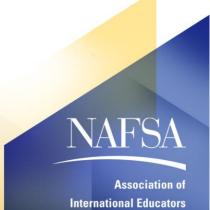


EuroScholars Program / Leiden University

Usha Mohunlol Coordinator European Office EuroScholars Program

u.c.mohunlol@sea.leidenuniv.nl www.euroscholars.eu





EuroScholars Program

The name 'EuroScholars'

The name EuroScholars both reflects the academic basis ('scholar') and the geographical location of the program in Europe ('euro'). Participants in the program become true 'EuroScholars' by contributing to European scientific research. 'Euro' also expresses the different characteristics of the program being an abbreviation for 'European Undergraduate Research Opportunities'.

The EuroScholars Consortium

9 European Research intensive universities are the owners of this program. Most Research Universities are members of the LERU (League of European Research Universities, <u>www.leru.org</u>)













The Consortium

9 Universities, 6 Countries:

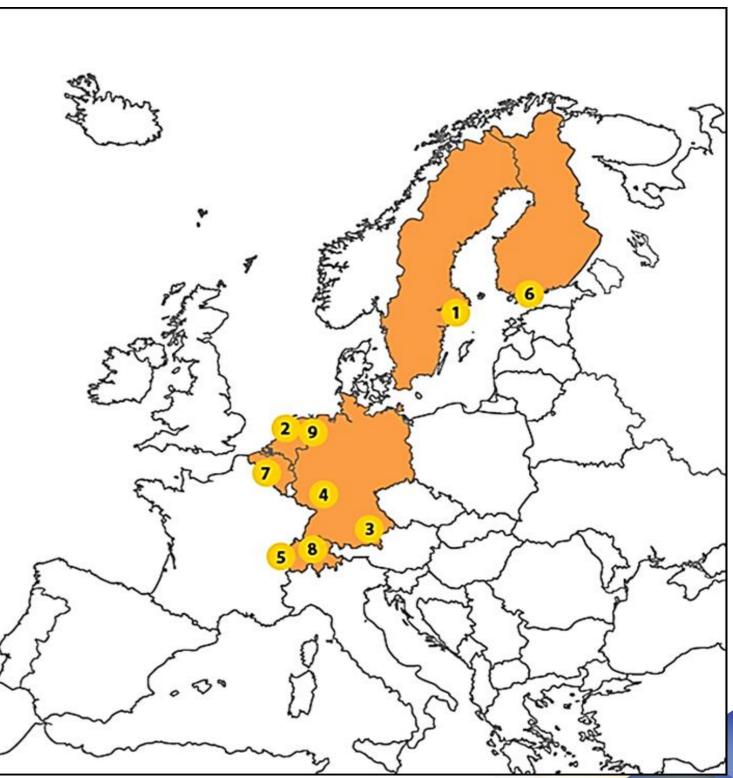
- 1.Karolinska Institutet, Stockholm, Sweden
- 2.Leiden University, Netherlands
- 3.Ludwig-Maximilians-Universität München, Germany
- 4.Heidelberg University, Germany
 5.University of Geneva, Switzerland
 6.University of Helsinki, Finland
 7.KU Leuven, Belgium
 8.University of Zurich, Switzerland
 9.Utrecht University, Netherlands

UNIVERSITÄT

HEIDELBERG

Universiteit

Leiden



Karolinska

Universiteit Utrecht



Zurich

Program Details

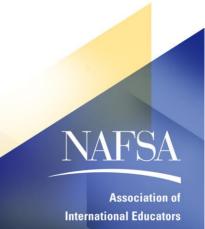
The program is a unique way for a niche group of students to experience study abroad, who otherwise, because of (self- or honors program imposed) academic or research requirements, would choose not to go abroad during their college career.

Fast Facts / Program Details

- Geared toward bright and independent undergraduate students with strong interest in research
- ✓ 3.4 GPA or higher required
- ✓ Intensive, research-oriented semester or academic year at one of the 9 prestigious Research Universities in Europe.
- Transfer of academic credits, learning agreement
 Earn up to 30 ECTS / equivalent to 15 US credits per semester.
 Each semester of study is considered full- time study
- \checkmark All research and deliverables are conducted in English
- Projects are available in all disciplines: STEM, humanities, social sciences, business & finance, law etc.







EuroScholars Program

Program fee per semester includes

- ✓ Basic student housing
- ✓ Language a/o culture course
- ✓ Midstay program: allows students to network, experience a new city, and present their research findings to date to peers and other academics
- ✓ Student facilities at host university
- \checkmark Supervision of the research project
- ✓ 1 Elective course (if applicable)

Application deadlines

✓ 1 April and 1 October







Statistics

- ✓ Since Spring 2008 up and including Spring 2016: 152 students in total
- ✓ North American institutions approved program: 73
- ✓ Students expected to participate in Fall 2016: 22



















Outcomes and impacts: students

- ✓ Increased academic maturity
- ✓ Hands-on experience in international research practices
- \checkmark Unique insight into chosen field of research
- \checkmark Increased interpersonal and academic communication skills
- ✓ Actual academic (joint) publications

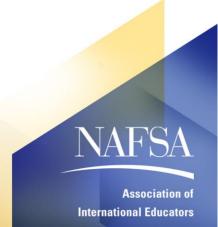
http://euroscholars.eu/alumni/joint-publications-by-euroscholars-alumni/

- $\checkmark\,$ Improved profile for further study and career decisions
- ✓ Admission to prestigious graduate programs worldwide
- ✓ Life-long transatlantic network
- Win prestigious awards / fellowships to continue their studies (e.g. Churchill Scholarship awarded to ES alumna from Leiden University / Penn State University to continue master at Cambridge University)









Outcomes and impacts: students

A few examples:

- ✓ ES alumna from UC Berkeley, now graduate student at Yale University and had 2 joint publications with her researcher at KU Leuven.
- ES alumna from University of Tulsa, graduated for Master at Utrecht University, now PhD student at Utrecht University.
- ES alumnus from Regis University / University of Geneva, now graduate student at University of Cambridge (UK)
- ES alumna from Clark University / University of Helsinki, now Geographic Information Science consultant in Rome (Italy)
- ✓ TED talk : <u>https://www.youtube.com/watch?v=aAPBiATt6LU</u>







Quotes from: students

A few examples:

- Maria Garcia Quesada (Tulane University / University of Geneva, S2014): "EuroScholars gave me the opportunity to independently lead, conduct, and complete a research project, which gave me very important skills that showed through [during] my job application process and helped me stand out as an applicant."
- Kerri Hunter (University of Manitoba / University of Helsinki, S2010): "The EuroScholars experience prepared me to do the kind of research I am doing, and I think helped me secure a spot in my master's program in Clinical research. I am very glad that I chose to participate in EuroScholars. It was one of the most beneficial experiences of my life so far."



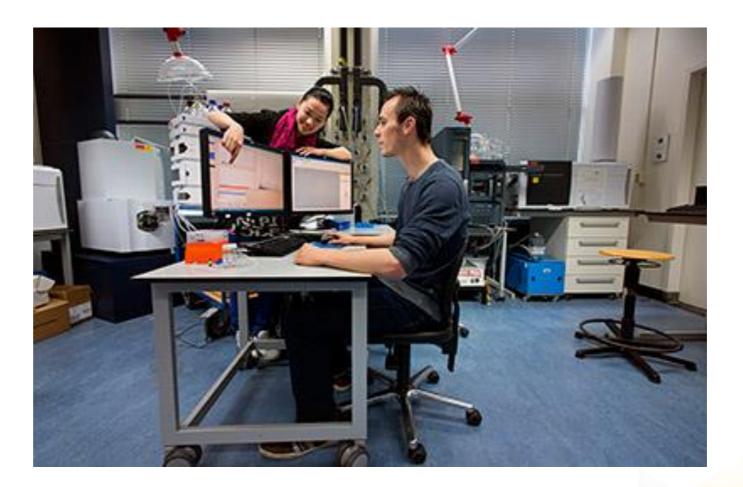






Outcomes and impacts: Researchers

- ✓ Highly motivated students with new perspectives and input
- \checkmark Increased internationalization within the research group
- Increased possibilities for academic / research cooperation and network with North American institutions
- ✓ Joint publications









Quotes from Researchers

- ✓ Dr. Chris Warren, Leiden University: "My student was extremely capable and independent and helped me get a lot of research done. I think the EuroScholars program was an excellent experience from my student and for me as well."
- Dr. Jos Malda, Utrecht University: "Student worked hard and got a lot done, results are the basis for a manuscript that is now being written. Good student, example for others - Science is an international field, hence I strongly support international interactions of my group members."
- Dr. Reinhilde Jacobs, KU Leuven: "My student was very eager to learn new things and picked them up very easily. We were impressed. All the things he needed to learn for the research were new to him, but he behaved as an excellent student with a true research oriented mind."













NAFSA







EURO Scholars European Undergraduate Research Opportunities



