California-Catalonia Program
Balsells Fellowship
Mobility and Graduate School in California

Presenters
Professor Roger Rangel
Professor Sergio Gago

October 2020
What to do after graduation?

- Get a job
- Learn more, become an expert and leader in your field
Why Graduate School in the USA?

• Opportunity to travel
• Learn more, better yourself, and benefit society
• Live abroad
• Expand your career options
• Achieve competitive positions and salaries
Historical Perspective

• The Balsells Fellowship (1996-2020)

Pete Balsells

• The Generalitat de Catalunya participated in the program until 2018
Peter J. Balsells

• Born in Barcelona in 1928
• Moved to United States at age 18
• Graduated from CU Boulder in 1952
  — B.S. degree in Mechanical Engineering
• Started **Bal Seal Engineering Company**
  in California in 1958 with his wife, Joan
  — Located near Irvine, California, and Colorado Springs, Colorado, the company today employs over 500 people
• Started the Balsells Fellowship Program at UCI in 1996
• Started the Balsells Graduate Fellowship Program
  at CU Boulder in 2010; at UCCS in 2013; and at UCD in 2015
• Francesc Macia Medal in 2003
• Premi Nacional de Recerca, Categoría Mecenatge in 2012
• Creu de Sant Jordi in 2013
• Honorary doctorates from CU Boulder (2014) and UdG (2016)
The Balsells Effect

https://www.youtube.com/watch?v=9v65Udt8r2c
Student Opportunities

**Mobility Program**
Short-term visits of 6 months to carry out final thesis for Bachelor’s or Master’s degree and to explore possibility of returning to the U.S. graduate school (M.S. and PhD)

**Graduate Studies**
Long-term visits to obtain Master’s degree and/or PhD degree

**Postdoctoral Fellowship**
One-year visit for PhD holders to conduct research at UC Irvine under the guidance of a faculty member.
Balsells Fellowships 1996-2020

UC Irvine
143 MS and PhD fellows
15 post-doctoral fellows
80 mobility fellows

Catalan Universities:
UAB, UB, UdG, UdL, UPC, UPF, URL, URV
Irvine - Orange County - Southern California

- Pop: 267,000 (Irvine) 3.2 Million (Orange Co.)
- 60 km south of Los Angeles
- A hub of high tech companies
- Surrounded by beach, mountains, arts, and entertainment
University of California, Irvine Snapshot

- [www.uci.edu](http://www.uci.edu)
- 36,000 students
- 15 schools and programs
- 3,100 teaching faculty members
- 7th among all U.S. public universities (USNews&WR 2019)
Nobel Laureates

Rose

Reines

Rowland
Henry Samueli School of Engineering

4,000 Undergraduates
1,000 Graduate students
150 Faculty Members

www.eng.uci.edu
DEPARTMENTS

- Biomedical Engineering
- Chemical & Biomolecular Engineering
- Civil and Environmental Engineering
- Electrical Engineering and Computer Science
- Materials Science & Engineering
- Mechanical and Aerospace Engineering
Some of Our Graduate Programs

Graduate Program: Biomedical Engineering
http://engineering.uci.edu/dept/bme/graduate

Graduate Program: Chemical and Biochemical Engineering
http://engineering.uci.edu/dept/chem/graduate

Graduate Program: Civil Engineering
http://engineering.uci.edu/dept/cive/graduate

Graduate Program: Electrical and Computer Engineering
http://engineering.uci.edu/dept/eecs/graduate

Graduate Program: Engineering with a Concentration in Environmental Engineering
http://engineering.uci.edu/dept/cive/graduate/environmental

Graduate Program: Mechanical and Aerospace Engineering
http://engineering.uci.edu/dept/mae/graduate

Graduate Program: Materials Science and Engineering
http://engineering.uci.edu/dept/chem/graduate

Graduate Program: Embedded and Cyber-Physical Systems
http://meecs.uci.edu
National Recognition

ENERGY AND SUSTAINABILITY
Scott Samuelsen & Jack Brouwer

HUMAN COMPUTER INTERFACE
Zoran Nenadic & Payam Heydari

CYBER SECURITY
Mohammad Al Faruque

Impactful Research
Donald Bren School of Information & Computer Sciences

www.ics.uci.edu

Figures:
- 3,547 Undergraduates
- 764 Graduate students
- 100 Faculty Members

Departments:
- Computer Science
- Informatics
- Statistics
GRADUATE PROGRAMS

Computer Science
Software Engineering
Informatics
Networked Systems
Statistics
Data Science
Embedded and Cyber-Physical Systems
Human-Computer Interaction and Design

HIGHLIGHTS

Computer Science is UCI’s 2nd-largest undergraduate major.
Top 15 Computer Science Graduate Program among public universities, as ranked by U.S. News & World Report.
Software engineering research is ranked #2 and HCI research is ranked #8 by CSRankings.org.
Game design program is ranked 3rd among public institutions by Animation Career Review.
Statistics received 2 of the 13 NSF Graduate Research Fellowships awarded to statistics students nationwide in 2019
ICS RESEARCH AREAS

- Medical Informatics
- Mobile and Ubiquitous Computing
- Multimedia Computing
- Networks and Distributed Systems
- Operating Systems
- Organization Studies
- Privacy and Personalization
- Programming Languages and Software Engineering
- Science and Technology Studies
- Scientific and Numerical Computing
- Security, Privacy, Cryptography
- Social Informatics
- Software Engineering
- Software Systems
- Statistics and Statistical Theory
- Sustainability and Green IT
- Ubiquitous Computing
- Algorithms and Complexity Theory
- Artificial Intelligence and Machine Learning
- Biomedical Informatics And Computational Biology
- Computational-Social Relationships
- Computer Architecture
- Computer Games and Virtual Worlds
- Computer Graphics and Visualization
- Computer-Supported Cooperative Work
- Computer Vision
- Database Systems
- Design
- Educational Technology
- Embedded Systems
- Environmental Informatics
- Health Informatics
- Human-Computer Interaction
- Information Retrieval and Visualization
- Interactive and Collaborative Technologies
- Medical Informatics
- Mobile and Ubiquitous Computing
- Multimedia Computing
- Networks and Distributed Systems
- Operating Systems
- Organization Studies
- Privacy and Personalization
- Programming Languages and Software Engineering
- Science and Technology Studies
- Scientific and Numerical Computing
- Security, Privacy, Cryptography
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- Software Engineering
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- Statistics and Statistical Theory
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- Ubiquitous Computing
- Algorithms and Complexity Theory
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- Biomedical Informatics And Computational Biology
- Computational-Social Relationships
- Computer Architecture
- Computer Games and Virtual Worlds
- Computer Graphics and Visualization
- Computer-Supported Cooperative Work
- Computer Vision
- Database Systems
- Design
- Educational Technology
- Embedded Systems
- Environmental Informatics
- Health Informatics
- Human-Computer Interaction
- Information Retrieval and Visualization
- Interactive and Collaborative Technologies
113,000+ SQ ft. includes laboratory support space, conference and collaboration centers.

Interdisciplinary Science and Engineering Building
Advanced Power and Energy Program
Beckman Laser Institute and Medical Clinic
Center for Advanced Design & Manufacturing of Integrated Microfluidics
Integrated Nanosystems Research Facility
The Edwards Lifesciences Center for Advanced Cardiovascular Technology
California Institute for Telecommunications and Information Technology
Center for Embedded Systems and Cyber-Physical Systems
Irvine Materials Research Institute
Center for Pervasive Communications and Computing
Center for Hydrometeorology and Remote Sensing
Institute for Design and Manufacturing Innovation
National Fuel Cell Research Center
UCI Combustion Laboratory
Water-Energy Nexus Center
Institute of Transportation Studies
Mobility Program

• Undergraduates or master’s students
• Undertake final project or master’s thesis typically for one term (6 months) at UC Irvine
• UC Irvine: Balsells Mobility
• Partial funding provided $7,000
• Approximately 5 positions per year
• Spring semester preferred
• **Significant preference given to those students who want to continue as graduate students at UCI after the mobility visit.**
Students interested in the Mobility Program should:

• Be interested in applying for the graduate program
• Have a strong academic record and at least intermediate English proficiency
• Provide letter of interest, curriculum vita, and academic transcript (all in English) to:
  – **UC Irvine**: Balsells Fellowship Program at [balsells@uci.edu](mailto:balsells@uci.edu)
Graduate Programs

Master’s: 1.5 years with thesis
- Courses
- Research
- Thesis
  - Industry
  - Government

Ph.D.: 3-4 additional years
- Courses
- Preliminary Exam.
- Qualifying Exam.
- Research
- Thesis
  - Industry
  - Government
  - Academia
Graduate Student Support

The support includes:

- Monthly stipend: $2,300 per month ($27,600 per year)
- Tuition, Fees & Insurance: $33,000 per year
- Travel stipend: $1,000 per year
- Total value: $62,000 per year
- Balsells Fellowship available for MS and PhD for up to 2 years
- Research & teaching assistantships available for the PhD
- 6-7 new fellowships each year
- Priority to students who apply for the PhD or the MS/PhD
Postdoctoral Fellowship at UC Irvine

Postdoctoral Fellowship in Engineering (UC Irvine)

• Monthly stipend: $4,150 per month
• Health Insurance: $10,000-25,000 per year
• Travel stipend: $1,000 per year
• Total value: $75,000 per year
• Up to 2 fellowships each year
Balsells Eligibility

Who can apply?

Spanish citizens who are permanent residents of Catalonia; speak English, Catalan and Spanish; and are graduates from Catalan or other European universities majoring in engineering or related fields.
**Requirements for admission to any of the graduate programs:**

- Undergraduate transcripts (original and English translation)
- GRE scores *(some programs waiving GRE for this cycle)*
- TOEFL/IELTS scores
- 3 Letters of recommendation
  - Highlighting your potential for performing independent, thoughtful research, and ability to think beyond formal course assignments
- Candidate statement *(Statement of Purpose)*
  - How you prepared for the graduate degree *(courses, experiences)*
  - Interests and career goals *(why you want to pursue this degree)*
  - Fit *(why you are a good match for the program)*
  - Your personal history that helped you decide to pursue this degree
## Timeline for Graduate (MS/PhD) Application

For undergraduate students currently in their 4th year or M.S. students in their final year

<table>
<thead>
<tr>
<th>What</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>This presentation</td>
<td>Oct 2020</td>
</tr>
<tr>
<td>Take GRE and TOEFL or IELTS exams</td>
<td>Dec 2020</td>
</tr>
<tr>
<td>Complete graduate application</td>
<td>Dec 2020 / Jan 2021</td>
</tr>
<tr>
<td>Admissions decision by the university</td>
<td>Mar 2021</td>
</tr>
<tr>
<td>Decisions on funding announced</td>
<td>May 2021</td>
</tr>
<tr>
<td>Fall term of graduate school starts</td>
<td>Sep 2021</td>
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</tbody>
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For undergraduate students currently in their 3rd year or MS students in their first year

<table>
<thead>
<tr>
<th>What</th>
<th>When</th>
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<tbody>
<tr>
<td>This presentation</td>
<td>Oct 2020</td>
</tr>
<tr>
<td>Apply for Mobility</td>
<td>Feb 2021</td>
</tr>
<tr>
<td>Start Mobility</td>
<td>Fall 2021 or Spring 2022</td>
</tr>
<tr>
<td>Take GRE and TOEFL or IELTS exams</td>
<td>Dec 2021</td>
</tr>
<tr>
<td>Complete graduate application</td>
<td>Dec 2021</td>
</tr>
<tr>
<td>Admissions decision by the university</td>
<td>Mar 2022</td>
</tr>
<tr>
<td>Decisions on financial support announced</td>
<td>Apr 2022</td>
</tr>
<tr>
<td>Fall term of graduate school starts</td>
<td>Sep 2022</td>
</tr>
</tbody>
</table>
Information on GRE, TOEFL & IELTS exams:

Information on applying to UC Irvine:
http://www.grad.uci.edu/admissions/applying-to-uci/
Thank you! Any questions?

For additional information please contact:

University of California, Irvine
balsells@uci.edu
https://balsells.eng.uci.edu/