# THE UNIVERSITY of rhode island international engineering program

# Meeting of the Advisory Board

May 22, 2015

Kingston, Rhode Island

## Letter from the Executive Director

Dear members of the IEP Advisory Board:

THE

UNIVERSITY OF RHODE ISLAND INTERNATIONAL ENGINEERING PROGRAM

We are looking back on another successful year, a year marked by a spirit of renewal and hope, yet also some challenges. The future of IEP students will be significantly impacted by the state-wide campaign – led by Dean Ray Wright – that secured a \$125 million bond to build a new engineering complex on the URI campus by 2019. Future engineering students will benefit from student-centered learning spaces, and state-of-the-art research labs. The new space will also increase the COE's admission capacity for new students, which will have a trickle-down effect on IEP numbers as well.

Our IEP directors and staff, several board members, IEP alums, students, and URI's senior leadership were all involved in the 17th Annual Colloquium on International Engineering Education: New Frontiers, held in November in Providence in which 156 people from around the world participated. The Colloquium focused on several new frontiers such as dual language immersion and STEM education models in K-16, educating a global work force, as well as assessment tools designed to measure global competency. Our directors were also very active in speaking at various conferences in the nation – from ASEE to NAFSA – disseminating the IEP's leadership role in international engineering education and bringing back inspiration to improve our own program: we are, for example, implementing lessons learned from the BYU Language Symposium and will introduce this Fall several returning 5th year/exchange students as language mentors on the German and Spanish floors to serve as role models in speaking the target languages.

We are very happy to have our Assistant Director of the LLC back this Spring. Angela Graney took an extended maternity leave in the Fall to tackle the gargantuan task of helping her baby overcome an extremely rare form of cancer. Despite spending last summer, fall, and winter in the hospital with baby Violet, Angela still managed to give advice and guidance on LLC procedures. Upon her return, she once again filled the houses for next year! A big thank-you goes to Coordinator Heather Price who jumped in along with IEP alum/graduate student Emily Serman -- both taking over the day-to-day housing operations.

Our new Spanish IEP Director Silke Scholz worked overtime to run the most complex and challenging of our IEP programs and successfully placed all 16 SIEPers in internships, partially provided by new and exciting company hosts, in Spain and Chile. In an effort to make SIEPers more familiar with Latin America and Chile as a country of choice for study and work, Silke and Vinka Craver (supported by Megan Echevarría's Chile grant) took a group of young SIEPers of various engineering disciplines to engage in a sustainability project in conjunction with our partner university in Valparaíso. Likewise, Lars Erickson jump-started a new marketing campaign for the French IEP by creating a J-term to Paris.

In the year ahead we are faced with managing the 15% growth of the IEP which is reflected in the largest ever group of German IEPers going abroad, necessitating a partnership with a second German university; we are simultaneously working on a new model for the German Summer School whose director of several decades, Norbert Hedderich, is stepping down.



Our first Italian IEPer will be attending the University of Calabria this Fall, and we will even have our first Electrical Engineering senior spending a year in Japan, doing a semester of research at Tokyo Institute of Technology followed by an internship in a Japanese company.

Preparations to launch a future Japanese IEP are underway – Dean Brownell and I secured funds to hire a Japanese lecturer; President Dooley represented the IEP at the TeamUp to Create a 21st Century Workforce Symposium hosted by Ambassador Caroline Kennedy and the US-Japan Bridging Foundation in Tokyo in March; Dean Wright and the President visited several Japanese companies, among them Shimadzu with whom they discussed future equipment sales to the College and support for the IEP; our Business Engagement Center in collaboration with the IEP followed up and we submitted an MOU to the company to ask for funds to launch a JIEP. I am presently in touch with the Tokyo Embassy to find the best academic partner for a JIEP.

The 2014-15 academic year brought about changes to the IEP Advisory Board. Frank Curtin passed away after two decades of serving on the IEP board. Please find our tribute to Frank on the following page. Laurie Burger and Michael DeRuosi stepped down because of personal reasons (please see Awards and Recognition section). We are pleased to welcome several new and energetic members to the IEP board: former R.I. gubernatorial candidate Clay Pell and Katherine Therieau, Director of International Trade Programs of the R.I. Commerce Corporation. We are especially pleased that three of our own alums who have launched successful global careers and are highly invested in the IEP also joined us: Eric Sargent (GIEP), Meghan Soens (SIEP), and Martha Ziolkowsky (FIEP). In another first, we welcomed TU Braunscheig/URI dual masters alum, Friederike Vollenberg, to the IEP house and URI campus for the Fall semester. Friederike was chosen as the first Deutsche Bahn Business Visitor and enriched our classrooms, student career opportunities at DB, and life in the IEP house tremendously.

Congratulations also to our two Honorary Doctoral degree recipients, Rolf-Dieter Schnelle and Angus Taylor. President Dooley's exceptionally well-crafted remarks during this weekend's Commencement festivities painted a clear picture of why they both are such deserving candidates for this great honor. At our board meeting on May 22nd we will have numerous reasons to continue to celebrate the IEP and the very special people involved in it...

Sig-d Relha

Sigrid Berka

Kingston, RI May 22, 2015

## In Memory of Frank Curtin



THE

UNIVERSITY OF RHODE ISLAND INTERNATIONAL ENGINEERING PROGRAM

> On December 31, 2014, we bid a sad farewell to our cherished, dedicated, and passionate champion and advisory board member, Frank Curtin. Frank served on the IEP Advisory Board for close to 20 years. He was an outspoken advocate of the IEP on many fronts, and did not hide his belief that the University needed to do more to support its flagship international program. Along with others, he was front and center when the program was still struggling to convince URI of the importance and value of the IEP. Frank made a difference. He and his wife Lynn generously supported the IEP because they believed in its value.

Frank Curtin had extensive managerial experience in global industrial business operations and strategy. His experience spanned several different fields including: design and manufacturing, automation, human resources, inventor control, profitability, plant consolidation, expansion, and modernization, just to name a few. Frank held managerial positions in several prestigious companies including General Electric, Cincinnati Milacron, Ingersoll Milling Machine Company, and Brown & Sharpe.

After retiring from B & S in 2000, Frank joined the Board of Ashworth Bros. Inc, a privately owned company producing conveyor belts for the global food industry with manufacturing facilities in the USA and in Holland. In October 2001 he became President and CEO and retired from the company in 2006.

As Frank said in 2008: "Over my fifty year career in business, I have seen many changes in technology used in the manufacturing process, and in management of the business process itself. Students today find it hard to imagine life without the computer (so do I!). The world itself has become much smaller and having spent seventeen years living and managing American owned businesses in Europe and Asia, I will attest to the incredible advantage our IEP graduates have in the ultra-competitive environment of today and tomorrow."

The IEP is grateful to Frank Curtin for his many years of service as an Advisory Board member and his constant support of our program.

This poem was a part of his memorial service and captures his persona.

Irish Blessing

May the road rise up to meet you. May the wind always be at your back. May the sun shine warm upon your face, and rain fall soft upon your fields.

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## International Engineering Program Advisory Board Members 2015

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Dr. Wen Xiong Associate Director Chinese IEP Assistant Professor of Chinese (401) 874-7025 wen\_xiong@uri.edu

## Enrollment Figures 2014-15

-	

Breakdown by Major*:	#	# Percentage of Total IEP-Serviced Students:						
IEP (Declared EGR)	344	86%	Total Engineering Students	357	90%			
IEP (Wanting Engineering)	13	3%	Serviced by IEP					
IBP (International Business Program)	26	7%	Total Non-Engineering Students	39	10%			
ICSP (International Computer Science Program)	9	2%	Serviced by IEP**					
Other**	4	1%						
Graduate (Dual Degree Masters)	2	1%	Total Graduate Students Serviced by IEP	2	1%			
Total Students Serviced by IEP*	398							

\*Due to double majors and rounding, percentages may not equal 100.

\*\*Includes 1 Anthropology major who was placed in an IEP internship abroad and 3 students wanting Japanese IEP.

IEP Undergrads (Declared Engineering)*	URI College of Engineering Undergrads*	% of COE
344	1437	24%

\*IEP numbers reflect enrollment collected Spring 2015. COE numbers reflect enrollment collected in Fall 2014 as head count of majors publicly reported by the URI Office of Institutional Research. Both numbers do not include Wanting Engineering designation.

IEP/College of Demographic	of Engineering s	IEP # (344)	% of IEP	COE # (1437)	% of COE
Gender	Female	92	27%	261	18%
	Male	252	73%	1176	82%
Ethnicity***	Represented Groups (White, Asian)	277	86%	1111	86%
	Underrepresented Groups (Black/African American, Hispanic/Latino, 2+ Races)	46	14%	178	14%
Residency	In-State Rhode Islanders	204	59%	803	56%
	Out of State	114	33%	470	33%
	Regional	20	6%	132	9%
	Out of Country	6	2%	32	2%
Scholarship Recipients	Centennial Scholarships or University Scholarships	186	54%	Data und	available
Talent Devel	opment	14	4%	Data und	available

\*\* IEP ethnicity numbers and percentages are based on 323 students who self-reported. COE ethnicity numbers and percentages are based on 1289 students who self-reported, not including Non-Resident Alien designation.

## 2014-15 Enrollment Figures By Language Track

By Engineering Discipline****	IEP #	% of IEP	COE Total # of Majors	% of COE
Biomedical	45	13%	192	13%
Chemical	38	11%	146	10%
Civil	37	11%	201	14%
Computer	26	8%	118	8%
Electrical	25	7%	113	8%
<ul> <li>Industrial &amp; Systems</li> </ul>	13	4%	60	4%
Mechanical	123	36%	408	28%
• Ocean	35	10%	133	9%
Undeclared B.S. in Engineering	4	1%	66	5%

\* IEP numbers reflect enrollment collected Spring 2015.

\*\*\*IEP numbers and percentages based on **323** who self-reported ethnicity. COE numbers and percentages based on **1289** who self-reported, not including Non-Resident Alien designation. \*\*\*\*Includes one ELE/CPE double major and one ELE/BME double major.



## 2014-15 Enrollment Figures By Language Track

#### 2014-15 Enrollment Figures By Language Track

German IEP		Spanis	sh IEP
180		102	
163*	90%	90**	88%
4	2%	4	4%
7	4%	6	6%
3	2%	2	2%
1	1%		
2	1%		
	Germa           180           163*           4           7           3           1           2	German IEP       180       163*     90%       4     2%       7     4%       3     2%       1     1%       2     1%	German IEP         Spanis           180         102           163*         90%         90**           4         2%         4           7         4%         6           3         2%         2           1         1%            2         1%

\*Includes one GIEP/SIEP dual major

\*\*Includes one SIEP/GIEP dual major

IEP Undergrads in COE (Declared EGR)	IEP #	% of IEP	IEP #	% of IEP
• Female	29	18%	31	34%
• Male	134	82%	59	66%
Rhode Islanders	98	60%	51	57%
Out of State	58	36%	27	30%
Out of Country	2	1%	2	2%
Regional	5	3%	10	11%
By Engineering Discipline*	IEP #	% of IEP	IEP #	% of IEP
Biomedical	11	7%	15	17%
Chemical	19	12%	8	9%
• Civil	11	7%	19	21%
Computer	8	5%	5	6%
• Electrical	13	8%	5	6%
Industrial & Systems	9	6%	1	1%
Mechanical	85	52%	20	22%
• Ocean	7	4%	16	18%
<ul> <li>Undeclared B.S. in Engineering</li> </ul>			2	2%

\*SIEP numbers include 1 ELE/CPE dual major.



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## Enrollment Figures By Language Track

	French IEP		Chinese IEP	
Total # of Students Serviced by IEP	52		40	
• IEP Undergrads in COE (Declared EGR)	40	77%	31	77%
IEP Undergrads Wanting Engineering	4	8%	1	2%
• IBP (International Business Program)	6	11%	6	15%
ICSP (International Computer Science)	2	4%	2	5%
<ul> <li>Graduate (Dual Degree Masters)</li> </ul>				

IEP Undergrads in COE (Declared EGR)	IEP #	% of IEP	IEP #	% of IEP
• Female	17	43%	8	26%
• Male	23	58%	23	74%
Rhode Islanders	25	63%	22	71%
Out of State	10	25%	8	26%
Out of Country	2	5%		
Regional	3	8%	1	3%
By Engineering Discipline	IEP #	% of IEP	IEP #	% of IEP
Biomedical	11	28%	6	19%
Chemical	6	15%	3	10%
• Civil	2	5%	4	13%
• Computer	5	13%	7	23%
• Electrical	4	10%	3	10%
<ul> <li>Industrial &amp; Systems</li> </ul>				
Mechanical	6	15%	4	13%
• Ocean	6	15%	3	10%
Undeclared B.S. in Engineering			1	3%

## Enrollment Figures By Language Track

	Italian	IEP
Total # of Students Serviced by IEP	22	
• IEP Undergrads in COE (Declared EGR)	21	95%
IEP Undergrads Wanting Engineering		
IBP (International Business Program)	1	4%
ICSP (International Computer Science)		
Graduate (Dual Degree Masters)		

IEP Undergrads in COE (Declared EGR)		
• Female	7	33%
• Male	14	67%
Rhode Islanders	9	43%
Out of State	11	52%
Out of Country		
Regional	1	5%
By Engineering Discipline	IEP #	% of IEP
Biomedical	2	10%
Chemical	2	10%
Civil	1	5%
Computer	1	5%
Electrical	1	5%
Industrial & Systems	3	14%
Mechanical	8	38%
• Ocean	3	14%
Undeclared B.S. in Engineering	1	5%



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## Enrollment Figures A Closer Look



	'05-'06	<b>'06-'07</b>	<b>'07-'08</b>	<b>'08-'09</b>	<b>'09</b> -'10	'10-'11	'11-'12	'12-'13	'13-'14	<b>'14-'15</b>
Overall	194	210	222	253	254	278	300	318	345	397
German	121	122	128	133	126	121	135	151	167	180
Spanish	42	52	52	63	69	94	101	98	89	102
French	33	28	27	28	29	33	37	36	43	52
Chinese	0	14	20	29	30	31	28	35	35	40
Italian									12	22

## 2015 Internships

#### THE UNIVERSITY OF RHODE ISLAND INTERNATIONAL ENGINEERING PROGRAM

### IEP directors made 45 international internship placements for the 2015 calendar year:

China	
1. Chris Kardaras**	Insigma HengTian
2. Alex Lam	Offshore Pipelines & Risers
3. Sam LeBlanc	Sentinel Tech
4. Kaitlynn von Dettum*	Insigma HengTian
France	
1. Kelsev Conahan	Medincell
2. Amanda Junkins	Medincell
3. Arielle De Souza	CEREMA
4 Katie Noonan	École des Hautes Études en Santé Publique
5. Patrick Moran	Bouygues Construction
Germany	
1. Boris Babic*	VW
2. Ian Calise	Baver
3. Joseph Furdon	IAV
4. Max Gutierrez	Maurer Söhne
5. Lucas Hanson	DB Schenker
6. Lucas Hohl-Marchetta	Beinbauer Automotive
7. Bryce Holden	Bosch
8. Paul Kintz	DB Netz
9. Ian Mace	ZF
10. Kevin Matthews	IAV
11. Patrick McNamara	Meyer Werft
12. Jacob Ohrnberger	Bayer
13. Conor O'Neil	Meyer Werft
14. Matthew Polak	Continental
15. Nastasja Rittling	Siemens
16. Joseph Rocchio	BASF
17. Sarah Steinchen	Osram Opto Semiconductors
18. Joseph Sullivan	BP Mineralöl
19. Riley Tuttle	IAV
20. Elizabeth Wynn	Bayer
Chile, Mexico, Spain	
1. Norman Blanchard	BASF Chile
2. Katie Brown	NBC
3. Aaron Brunelle	CREG Catalysis
4. Raul Chacon	SEAT S.A.
5. Jack Clark	Puerto Ventanas
6. Max Grabinski	Pedelta
7. Jessica Havas	NBC
8. Patricia Hogan	Arup
9. Bradley Leusner	Geotecnia Ambiental
10. Jenniier McGunigal	Hope Global
11. Sean Marran	Hope Global
12. Cara Nunez	
13. INICOLE INUNEZ	SLAI S.A. SEAT S.A
15 Noloon Sharand	SEAI S.A. Dedelte
10. NEISOII SIICPAIU	FCUCIIA

**3PBio** 

Hangzhou Hangzhou Tianjin Hangzhou

Jacou Jacou Compiègne Rennes Marseille

Wolfsburg Leverkusen Gifhorn München Mainz Büchlberg Stuttgart Frankfurt Friedrichshafen Gifhorn Papenburg Leverkusen Papenburg Hannover München Ludwigshafen Regensburg Gelsenkirchen Gifhorn Leverkusen

Concón (Chile) Curauma (Chile) Zaragoza (Spain) Barcelona (Spain) Quintero (Chile) Barcelona (Spain) Curauma (Chile) Madrid (Spain) Valparaíso (Chile) León (Mexico) León (Mexico) Madrid (Spain) Barcelona (Spain) Barcelona (Spain) Barcelona (Spain) Noáin (Spain)

\* International Business student placed by IEP director

16. Tracy Waweru

\*\*Political Science student placed by IEP director





	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11
German	8	6	8	5	12	9	3	11	15	16	18	18	18	14	20	20	10	21	17	23	19	25
French											1	1	1	4	4	4	5	1	3	3	6	3
Spanish										1	1	1	5	3	8	1	2	5	5	6	9	5
Chinese																		0	2	0	2	0
Yr Total			8	5	12	9	3	11	15	17	20	20	24	21	32	25	17	27	27	32	36	33
Cum	8	14	22	27	39	48	51	62	77	94	114	134	158	179	211	236	253	280	307	339	375	408

		1											
	12	13	14	15									
German	16	14	19	20									
French	2	6	3	5									
Spanish	9	6	14	16									
Chinese	7	0	7	4									
Yr Total	34	26	43	45									
Cum	442	468	511	556									

## Internship Partners 1990-2014 International and Domestic

3P Biopharmaceuticals (Noáin) Abengoa (Sevilla) Aerodata (Braunschweig) Agfa (Leverkusen, Gera) Air Liquide (Jouy-en Josas-Cedex) Air Nostrum (Valencia) Apia XXI (Santander) Applied Materials (Alzenau) Arup (Madrid) Astilleros de Santander A.S (Astander) AUDI (Ingolstadt) Aviso (Gera) Axiva (Frankfurt) BASF (Ludwigshafen, Chile) Bayer (Leverkusen) Bayer Technology Services (Shanghai) Beinbauer Automotive (Büchlberg) Beiersdorf AG (Hamburg) Benteler (Paderborn) Blaupunkt GmbH (Hildesheim, Germany) BMW (Munich, New Jersey, South Carolina) Böhringer Ingelheim Microparts (Dortmund) **Bouygues Construction** (Marseille) **BP** Mineralöl (Gelsenkirchen) Bruker Biospin (Wiessemebourg) **B&J** Adaptaciones (Barcelona) CEIT (San Sebastián) **CEREMA** (Compiègne) CGG (Paris) Communication Technologies Research Group (Zaragoza) Continental (Hannover, Regensburg) **CREG** Catalysis, Molecular Separations & **Reactor Engineering Group (Zaragoza)** Daimler (Stuttgart, NJ, MI) **DB Netz (Frankfurt) DB Schenker (Mainz)** Deutsche Bahn (Munich, Berlin, Minden, Kassel)

Draeger Medical (Lübeck) École des Hautes Études en Santé Publique (Rennes) Emitec (Lohmar) ENERCAP (Lyon, France) Ennera (Ibarra) Ewag GmbH (Solothurn) Experimentierstation Obstbau (Schlachters) Fashion Power (Hangzhou) Fatronik (San Sebastián) Gamesa S.A (Bilbao) General Motors (Zaragoza) Geocéan (Marseille) Geotechnia Ambiental (Valparaiso) **GKN** Driveline (Zumaia) Grupo de Ingeniería Oceanográfica y de Costas Universidad de Cantabria (Santander) GTM (Batiment) Hasbro (Hong Kong & Shenzhen) Hexagon (Quingdao, Wetzlar) Hilti (Germany, Liechtenstein, Spain) Hochtief (Essen, Hamburg) Hope Global (León) Hutchinson (Auxy) IAV (Gifhorn) IAVF Antriebstechnik AG (Karlsruhe) Ibaia Energía (Beasain, Ibarra) IDOM (Bilbao, Zaragoza) Indaber Ibiza (Ibiza) Infineon AG (Munich) Infremer (LaRochelle) Insigma HengTian (Hangzhou) Instituto de Hidráulica Ambiental (Cantabria) Johnson & Johnson (NJ, São Paulo) King Marine (Valencia) KOB (Kaiserslautern)

Note: Companies marked in bold are new this year.

## Internship Partners 1990-2015 International and Domestic

Kolbenschmidt Pierburg (Neckarsulm, Abadiano) Kraft Foods (Munich) KS Fototechnik (Wuppertal) Leica Camera (Solms) Lemförder AG (Spain, Germany, South Carolina) LMU ArchäoBioCenter (München) Lufthansa Technik AG (Hamburg) Lur Geroa (Irurtzun) LMS Imagine (a Siemens business) (Lyon) Maurer Söhne (München) Medincell (Jacou) **Meyer Werft (Papenburg)** MTU (Hanover, Munich) NBC (Curauma) Novacare (Concepción) Oakwood Asia (Hangzhou) Offshore Pipelines and Risers (Hangzhou) Osram Opto Semiconductors (Regensburg) Pedelta (Barcelona) Pentair Electronic Packaging (Quingdao) PolyIC (Fürth) Praxair (Spain) Preusse Baubetriebe GmbH (Hamburg) Price Waterhouse (Frankfurt) **Puerto Ventanas (Quintero)** Renault (Guyancourt) Rhodia (Clamecy, Lyon) Robert Bosch GmbH (Stuttgart) Robotiker (Zamudio) Rhodia (Paris) Saint-Gobain (Cavaillon, Avignon, Germany, MA) Salzgitter (Salzgitter) SAMTACK (Barcelona) SAP (Karlsruhe, Montreal) Schneider Electric (Montpellier, France) Schroff GmbH (Straubenhardt)

SEAT (Barcelona) Sensata Technologies (Aguascalientes, Changzhou) Sentinel Tech (Tianjin) Siemens (Munich, Erlangen, Madrid) Sky Deutschland (Unterföhring) State Key Laboratory for Chemical Engineering (Hangzhou) Supfina (Rhode Island, Schapbach) STMicroelectronics (Grenoble) Tecnalia (Derio, San Sebastian) Tennet Offshore (Lehrte) Texas Instruments (Aguascalientes) Tianjin Normal Univ., Materials Science Lab (Tianjin) Thermochemical Processes Research Group (Zaragoza) Toray Plastics (Lyon) Total (Paris, Pau) TRW (Alfdorf) ULPGC (Las Palmas de Gran Canaria) UniCredit (Hypovereinsbank) (München) VAM/Becker Bau (Kiel) Vademecum (Madrid) VDO Automotive AG (Villingen) Volkswagen (Wolfsburg) Vorwerk & Co. (Wuppertal) ZF (Germany, Spain, France, USA, Mexico, China) Züblin AG (Stuttgart)

Exchanges German IEP

## Technische Universität Braunschweig

	URI to TU-BS	TU-BS to URI
AY 1995-96	5	5
AY 1996-97	9	9
AY 1997-98	13	12
AY 1998-99	14	12
AY 1999-00	15	16
AY 2000-01	13	13
AY 2001-02	20	25
AY 2002-03	15	15
AY 2003-04	21	16
AY 2004-05	21	16
AY 2005-06	12	14
AY 2006-07	24	14
AY 2007-08	22	13
AY 2008-09	24	22
AY 2009-10	25	14
AY 2010-11	28*	16
AY 2011-12	14	10
AY 2012-13	15*	12
AY 2013-14	20*	15
AY 2014-15	22*	17
Total	352	286

### Total # of Students Exchanged = 638

\* Includes dual-degree masters students (Does not include short-term visitors.)



Exchanges French IEP

## Université de Technologie de Compiègne - UTC

	URI to UTC	UTC to URI
AY 05-06	2	3
AY 06-07	2	3
AY 07-08	3	3
AY 08-09	4*	4
AY 09-10	6	3
AY 10-11	3*	6
AY 11-12	6*	3
AY 12-13	7*	3
AY 13-14	3	7
AY 14-15	5	4
TOTAL # of Students Exchanged	41	39

\* Includes other majors







## Exchanges Spanish IEP

## Universidad de Cantabria - UNICAN (Spain)

	URI	UC					
	to UC	to URI					
AY 04-05	1	-					
AY 05-06	-	-					
AY 06-07	1	-					
AY 07-08	2	-					
AY 08-09	3	-					
AY 09-10	2	1					
AY 10-11	-	2					
AY 11-12	3	2					
AY 12-13	3	7					
AY 13-14	3	2					
AY 14-15	3	2					
TOTAL	21	16					
# of Students Exchanged							

## Universidad de Navarra - TECNUN (Spain)

	URI to TECNUN	TECNUN to URI
AY 02-03	1	-
AY 03-04	-	2
AY 04-05	-	2
AY 05-06	3	-
AY 06-07	-	1
AY 07-08	-	1
AY 08-09	-	1
AY 09-10	2	2
AY 10-11	3	-
AY 11-12	2	2
AY 12-13	-	1
AY 13-14	8	2
AY 14-15	2	4
TOTAL # of Students Exchanged	21	18

## Universidad de Zaragoza - UNIZAR (Spain)

( - 1	/	
	URI to UZ	UZ to URI
AY 00-01	-	2
AY 01-02	2	2
AY 02-03	4	2
AY 03-04	-	3
AY 04-05	-	3
AY 05-06	-	-
AY 06-07	-	-
AY 07-08	-	-
AY 08-09	2	1
AY 09-10	5	2
AY 10-11	3	2
AY 11-12	4	4
AY 12-13	3	2
AY 13-14	2	3
AY 14-15	6	-
TOTAL # of Students Exchanged	31	26

## Pontificia Universidad Cathólica de Vaparaíso - PUCV (Chile)

	URI to PUCV	PUCV to URI
AY 14-15	5	2
TOTAL # of Students Exchanged	5	2

## Exchanges Chinese IEP

## Zhejiang University (Hangzhou, China)

	URI to ZU	ZU to URI
AY 06-07	-	-
AY 07-08	2	1
AY 08-09	-	-
AY 09-10	7*	8
AY 10-11	-	2
AY 11-12	8*	8
AY 12-13	1	-
AY 13-14	5	6
AY 14-15	4	2
TOTAL # of Students Exchanged	27	27

\*Includes other majors



## Chinese Language Flagship Partner Program Highlights

The first IEP Chinese Flagship Scholar Alyssa Zisk is graduating in May 2015 with a B.S. in Mechanical Engineering and a B.A. in Chinese

Alyssa is also pursuing her M.S. in Mathematics, which she will continue this coming year, after having already completed her B.S in Mathematics in December 2012 during her third year at URI.

IEP Chinese Flagship Scholars by Cohort (Year Entered)	Total
2009 Cohort: ELE (Currently completing Capstone Year in China)	1
2010 Cohort: MCE	1
2011 Cohort: N/A	0
2012 Cohort: BME, MCE	2
2013 Cohort: CHE (2), CMP (3), CVE	5
2014 Cohort: BME, CMP, ELE, OCE, UND (2)	6

## Awards

The second IEP Chinese Flagship Scholar Samuel LeBlanc is currently completing the Flagship Capstone Year in China in 2014-15, including a semester of direct-enrollment at Tianjin Normal University and a professional internship at Sentinel Tech in Tianjin. Sam was awarded a Flagship Capstone Scholarship and an IEP Hasbro Scholarship this year. Samuel is pursuing a B.S. in Electrical Engineering and a B.A. in Chinese and will graduate this summer. Seven IEP Chinese Flagship Scholars were awarded Hasbro Scholarships for their studies at Zhejiang University during Winter 2014-15 and/or in Flagship-approved summer programs in China during Summer 2015:

Samuel Browne, Chemical Engineering & Chinese, '18

Victoria Eno, Electrical Engineering & Chinese, '19

Jessica Hall, Computer Engineering & Chinese, '18

Alex Jenkins, Chemical Engineering & Chinese, '17

Jacob Maloof, Engineering Undeclared & Chinese, '19

Alexandra Villari, Computer Engineering & Chinese, '19

Jun Yu Lu, Computer Engineering & Chinese, '18

Two IEP Chinese Flagship Scholars were awarded Benjamin A. Gilman International Scholarships for their studies in the Flagship-approved summer CIEE Accelerated Chinese Language Program in Shanghai, China during Summer 2015:

Quang Le, Computer Engineering & Chinese, '17

Jun Yu Lu, Computer Engineering & Chinese, '18

## Graduates December 2014 - August 2015

German (18) Jonathan Aguire Jordan Barlow Kenneth Betzold Thomas Cottam Steven Dupre John Heaslip Matthew Hooks Daniel Kaehler Tabitha Koehn Eli Lamothe John Leach Kyle MacKenzie **Ryan Michaels** Jonathan Morasutti Stephen Pelletier Johann Prieto Jacob Rooney Nicholas Zonfrillo

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> > <u>French (2)</u> Hicham Benjelloun Jonathan Young

<u>Spanish (12)</u> Kenneth Betzold Nicholas Bodell-Kudla Michael Caneja Nicholas Crowley Jessica Damicis Luis De Cardenas Dana Demers Kevin Drumm Umutoni Amandine Gatali Erik Simpanen Michael Smith Preston Steele

<u>Chinese (1)</u> Alyssa Zisk IEP Graduates through 2015: 456

German: 330

French: 44

Spanish: 72

Chinese: 10

### Other graduates serviced by the IEP in 2014-2015

<u>German (2)</u> Patrick Mullen, IBP Sarah Watson, IBP

<u>Spanish (1)</u> Marcos Rodriguez, IBP





This academic year, the IEP Living Learning Community was home to 22 international students from countries around the world, including our newest exchange partners, Italy and Chile. When asked, both American and international students said that living in a culturally diverse environment enhanced their experience.



## Cost Comparison of Living at the Heidi Kirk Duffy Center 2014-2015

Room & Board Fees (based on a 15 meal/week meal plan)

	IEP & TI House	Women's Center	Engineering LLC
single	\$5,685	\$5,825	N/A
double	\$5,330	\$5,325	\$5,820

Note: The Engineering Living/Learning Community is a part of Housing and Residential Life at the University. The cost to live there includes a meal plan with unlimited visits to the dining hall.

## **Cumulative Honor Roll**

(as of May 1, 2015)

## Over \$500,000

Heidi Kirk Duffy ZF Friedrichshafen AG Max Kade Foundation

## \$150,000 - \$500,000

Annette Kade Foundation Van Meeteren Foundation Texas Instruments Hasbro, Inc. Sensata Technologies

## \$75,000 - \$150,000

TRW Corporation Praxair, Inc. Thomas Wroe, Jr.

## \$25,000 - \$75,000

Schroff, Inc. Brown & Sharpe Manufacturing Co. Bacou USA John and Carol Grandin Hilti AG Siemens Corporation William and Pauline Silvia Tonya McBride Robert C. and Judith A. Ayotte Boxer Family Deutsche Bahn

## \$2,000 - \$25,000

Hexagon Metrology Inc. W&H Corporation BMW Manufacturing Corp. Supfina Machine Co. Inc. Lufthansa German Airlines Frank and Lynn Curtin **Ewag Corporation** Draexlmaier Automotive of America Joseph O'Hearn and Barbara Brusini Pentair, Inc. James Hopkins Gabriel Lengyel **Richard Vandeputte** Rick D'Ambrosca Vincent DiPippo Patrick Tunney Sigrid Berka/Thomas Kniesche Walter Giraitis Michael Byrnes Laurie Burger Hubertus Christ

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### **Publications:**

**Berka, S., Serman, E., Echevarría, M., Erickson, L., Scholz, S., Geithner, A.,** "Integrating a Portfolio of Short with Long-Term International Programs in the Engineering Curriculum." Conference Proceedings of the ASEE International Forum 2015 (forthcoming June 2015).

**Echevarría, M.** "Preparing Engineers for Global Challenges: Engaging with Chile through the 100,000 Strong in the Americas Initiative," Conference Proceedings of the ASEE International Forum 2014.

**Grandin, J., Berka, S.,** "Reforming American Higher Education: The University of Rhode Island International Engineering Program," ADFL Bulletin, 43.1, April 2014, pp. 23-44.

**Grandin, J., Berka, S.,** "The University of Rhode Island International Engineering Program: A Model for the Merger of Technology and the Humanities," Russian Language Journal, Vol. 64 (2014), pp. 25-51.

**La Luna, M.** De Rada, Girolamo. Opera Omnia. Epistolario con A. De Gubernatis. La corrispondenza tra Girolamo De Rada e Angelo De Gubernatis (1870-1900). [Opera Omnia. Correspondence with A. De Gubernatis. The Correspondence between Girolamo De Rada and Angelo De Gubernatis (1870-1900).] Michelangelo La Luna, ed. Vol. XII, 2. Rende: University of Calabria; Soveria Mannelli: Rubbettino Editore (in press, forthcoming).

**La Luna, M**. "Girolamo De Rada e l'Indipendenza dell'Albania." ["De Rada and Albania's Independence."] STUDIME Në nderim të prof. Francesco Altimarit me rastin e 60-vjetorit të lindjes. STUDI In onore del prof. Francesco Altimari in occasione del 60° compleanno. Bardhyl Demiraj, Matteo Mandalà and Shaban Sinani, eds. Tiranë (Albania): Shtëpia botuese "Naimi", 2015.

**Xiong, W.** (2015) Invited Book Review, Discover China (8 volumes series book), in Journal of the Chinese Language Teachers Association (JCLTA), Feb. U.S.A. pp. 101-110.

**Xiong, W.** (2014) Chuji Jieduan Hanyu Xuexizhe Kouyu Yuliao de Yuyanxue Pinggu he dui Kouyu Jiaoxue de Fanbo. "(The Backwash to Teach Speaking Chinese Based on the Assessment of Chinese L2 Beginners' Utterance)", in Hong, Lijian (Eds.) Chinese Teaching in Different Linguistic, Cultural and Policy Contexts. (pp. 225-337) Shanghai: Academia Press.

### **Presentations and Outreach:**

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**Berka, S.** "Complementing On-Campus Engineering Research Experiences with Tailored International Research Projects in Partner Universities and Internships in Industry Abroad," ASEE North East Section Conference, Boston, MA. May 2nd, 2015.

**Berka, S**. "Globalizing the Engineering Curriculum," presented at the Globalizing Education conference of the University Faculty Senate, City University of NY (CUNY) John Jay College, April 24th, 2015.

**Berka, S., Papa, E.,** "Building Community through Dual Degree Program Language Housing," Symposium on "Language Housing" organized by Jennifer Bown, Wendy Baker and Tony Brown at Brigham Young University, March 5-6, 2015, Provo, Utah.

**Berka, S**. Organizer of the 17th Annual Colloquium on International Engineering Education: New Frontiers, November 6-8, 2014 Providence, R.I. Also presented the IEP in the Getting Started workshop.

**Berka, S.**, "The International Engineering Program and German-U.S. Cultural Differences," on panel "Global Intercultural Education in US Higher Education – International Programs at URI," at the 2014 20th International IAICS conference: Enhancing Global Community, Resilience and Sustainability Through Intercultural Communication, Providence, RI July 31-August 3, 2014.

**Berka, S.,** "Preparing Engineers for Global Challenges: Engaging with Chile through the 100,000 Strong in the Americas Initiative," presented at the ASEE International Forum 2014, Indianapolis, IN, June 15, 2014.

**Boving, T.** presented on the panel "New Frontiers in Global Interdisciplinary Programs: Linking Engineering with the Sciences, Social Sciences, and Beyond" at the 17th Annual Colloquium on International Engineering Education: New Frontiers, Providence, Nov. 7, 2014.

**Brownell, W.** "Integrating Language Learning Across the Disciplines." May 19, 2014, National Security Education Program Flagship conference in Los Angeles, CA.

**Brownell, W.,** Moderator of the panel "Global Intercultural Education in US Higher Education – International Programs at URI," at the 2014 20th International IAICS conference: Enhancing Global Community, Resilience and Sustainability Through Intercultural Communication, Providence, RI July 31-August 3, 2014.

**Brownell, W.** introduced keynote speaker Lee Tablewski of the 100,000 Strong in the Americas Innovation Fund at the 17th Annual Colloquium on International Engineering Education. Providence, RI. November 6, 2014.

**Byrnes, M**. moderated the "Working Group on Asia/Australasia" at the 17th Annual Colloquium on International Engineering Education: New Frontiers, Nov. 8, Providence, R.I. 2014.

**Craver V.,** moderated the panel "Engaging Latin America: Educating Global Engineering Leaders," 17th Annual Colloquium on International Engineering Education: New Frontiers, Nov. 6, Providence, R.I. 2014.



**DeHayes, D**. moderated the "Round Table with Institutional Leadership on Internationalization Strategies" at the 17th Annual Colloquium on International Engineering Education: New Frontiers. Providence, RI. November 8, 2014.

**Dooley, D.** introduced keynote speaker, Utah State Senator Howard Stephenson at the 17th Annual Colloquium on International Engineering Education. Providence, RI. November 6, 2014.

**Echevarría, M., Berka, S., Gatali A.** will each speak at the 100,000 Strong in the Americas: Capacity Building Workshop II: Learning Together in the Americas, Northeastern University, May 24, 2015.

**Echevarría, M., Simpanen, E.** presented on the panel "Engaging Latin America: Educating Global Engineering Leaders," 17th Annual Colloquium on International Engineering Education: New Frontiers. Providence, R.I. 2014, November 6.

**Erickson, L**. "Using French Abroad: Case Studies of Students' Language Contact in Study and Internship Abroad." Global Advances in Business and Communication Tri-Continental Conference. Ypsilanti, MI. May 30, 2015.

**Erickson, L.** "Languages for a Specific Purpose." 17th Annual Colloquium on International Engineering Education: New Frontiers, Providence, RI. November 8, 2014.

**Erickson, L.** "Speaking When It Matters: A Case Study Comparing French Use between Study and Internship Abroad." Twentieth Conference of the International Association for Intercultural Communication Studies. Providence, RI. August 2, 2014.

**Geithner, Anett, Neilsen, J.** presented on the panel "Engaging and Assessing our Students While Abroad and Engaging International Students on our Campuses," at the 17th Annual Colloquium on International Engineering Education: New Frontiers. Providence, November 7, 2014.

**Grandin, J.** "The URI International Engineering Program and its Relationship to a Kalamazoo College Education," Kalamazoo College Alumni Meeting, Copley Square Hotel, Boston, April 22, 2015.

**Hedderich, N**. Chair of the working group on "Languages for a Specific Purpose." 17th Annual Colloquium on International Engineering Education: New Frontiers. Providence, RI. November 8, 2014.

**Papa, E.,** presented in the workshop "Pathways to Language Excellence: Integrating Language and Workforce Needs" at the 17th Annual Colloquium on International Engineering Education: New Frontiers, Providence, RI. November 7, 2015.

**Papa, E., Pell, C.** organized and hosted a luncheon on "Statewide Dual Language Immersion Initiatives" with educational, legislative and business leaders at the Hope Club, Providence, RI, November 7, 2014.



**Pell, C.** moderated the workshop "Pathways to Language Excellence: Integrating Language and Workforce Needs" at the 17th Annual Colloquium on International Engineering Education: New Frontiers, Providence, RI, November 7, 2015.

**Xiong, W.** Contrastive Studies on Modal Expressions in Chinese, English and Korean. The 11th International Young Scholar Conference on: Transnational Communication on Chinese Studies, Hankuk University of Foreign Studies, Seoul, Feb 27.-March 2, 2015.

**Xiong, W.** The Survey on the Standardized Tests of Chinese in North America at the 2015 Annual Conference of National Council of Less Commonly Taught Languages, Virginia, April 24-26, 2015, co-presented with Prof. Jianxin Cui from University of Maryland. (A Hanban sponsored project.)

**Wright, R.** introduced keynote speaker Cheryl Merchant, CEO of Hope Global, at the 17th Annual Colloquium on International Engineering Education: New Frontiers. Providence, RI. November 7, 2014.

## Student Awards and Recognition

**DAAD Undergraduate Scholarship** Sarah Rheault (GIEP)

## DAAD UAS7 SIP Scholarship

Claudia Krah (GIBP)

**University Excellence Award in Engineering** Preston Steele (SIEP)

**Nelson C. White Award** (COE) Dana Demers (SIEP)

## University Academic Excellence in German

Eli Lamothe (GIEP)

## Beatrice S. Demers Foreign Language Fellowship

Rachel Andronowitz (GIEP) Andrea Ayala (GIEP) Caleb Gross (GIEP) Erick Javier (FIEP) Shane Kirkland (SIEP) Claudia Krah (GIBP) John Neilsen (GIEP) John Paquet III (GIEP) Jose Perez (GIEP) Angela Reisch (FIEP) Sarah Rheault (GIEP) Jeric Rodriguez (GIEP) Christopher Salazar (SIEP) Brenden Smerbeck (FIEP) Michael White (SIEP)

### **FISITA Bursary Scholarship**

Raul Chacon (SIEP) Ian Mace (GIEP) Joseph Furdon (GIEP) Kevin Mathews (GIEP) Bryce Holden (GIEP) Riley Tuttle (GIEP)

### John Grandin Scholarship Award

Raul Chacon (SIEP) Nora Zuhoski (SIEP)

**Ayotte Family French IEP Award** Morgan Hammick (FIEP)

Wroe Family Scholarship Award Alex Lam (CIEP) **William & Pauline Silvia Scholarship Award** Cara Nunez (SIEP)

**Shawn McBride Scholarship Award** Michael Caneja (SIEP)

**Sharon Wallace Scholarship Award** Rachel Andronowitz (GIEP)

### Spanish IEP Internship Scholarship

Aaron Brunelle (SIEP)Nelson Shepard (SIEP)Max Grabinski (SIEP)Tracy Waweru (SIEP)

### Hasbro Chinese IEP Scholarship

Samuel Browne (IEP) Kevin Conroy (IEP) Victoria Eno (IEP) Jessica Hall (IEP) Jun Yu Lu (IEP) Jacob Maloof (IEP) Alexandra Villari (IEP)

## Teodor Raffale Diaco Excellence in Italian Award

Samuel Karnes (IIEP) Emily Tacopina (IIEP) Jeremiah Sullivan (IIEP)

### Barbara Woods Memorial German Studies Award

Connor Briden (GIEP)Caleb Gross (GIEP)Andrew Brown (GIEP)Alex Tsoukalas (GIEP)

#### **Frank L. Woods Memorial Scholarship** Katie Bryan (GIEP)

**Otto Dornberg Award** Mark Farat (GIEP)

Justin Sundaram (GIEP)

## Flagship Excellence Award

Jacob Maloof (CIEP)

#### Gilman Summer Scholarship Le Quang (CIEP) Ju Yu Lu (CIEP)

**The Edmund S. and Nathalie Rumowicz Maritime Essay Contest** Jessica Havas (SIEP)

## IEP Awards and Recognition

All of us at the IEP would like to congratulate **Sigrid Berka on her promotion to Full Professor of German** this spring. As you know, Sigrid joined the IEP in 2009 as the Associate Director and quickly moved up the ranks to Executive Director. Sigrid works tirelessly to enhance the IEP. Under her leadership, the program has grown exponentially, received national awards for excellence and expanded to new countries, including adding the Italian IEP. In addition to these accomplishments, Sigrid has raised close to \$1.3 million to benefit the program. She has also expanded the human resources of the IEP, adding several new positions, which is no easy task. We are so very proud to call her our supervisor and colleague!

**Winifred Brownell** was renewed as Dean of Arts & Sciences for another three-year term. In her renewal meeting, Provost DeHayes praised her for her successful partnership with engineering via the IEP. Earlier in 2014, Dean Brownell received a Dream Maker Award from the RI International Film Festival for her contributions to film education and the film industry.

**Raymond Wright** led a successful campaign to secure a \$125 Million bond from the State of R.I. to build a new engineering complex scheduled to open in 2019. He was also selected as the 2015 Engineer of the Year by the Rhode Island Society of Professional Engineers. They recognize an engineer each year within the R.I. community who applies exemplary technical and leadership qualities toward advancement of the engineering profession; an engineer who mentors young engineers while also extending their influence by becoming involved in the community in areas outside of their expertise.

**Lars Erickson** was awarded a year-long sabbatical. Project title: "French for Engineering." Project Description: A textbook on French for engineering purposes in which students interact with documents in French to accomplish an engineering task. Project Site: Bayonne, France hosted by the Université de Pau et des Pays de l'Adour. Project Status: Georgetown University Press is considering putting the manuscript under contract.

**Rolf-Dieter Schnelle**, former Consul General of Germany in Boston and IEP board member emeritus, received an honorary Doctor of Humane Letters degree from the University of Rhode Island for his fabulous support (e.g. most notably securing a sizable grant from the German Ministry of Economics and Labor) and his continued educational collaboration with the program, e.g. in terms of trans-Atlantic scholarships, and our annual J-term trips to Berlin.

**Angus Taylor**, CEO of Hexagon Metrology and IEP board member, received an honorary Doctor of Business degree from the University of Rhode Island. We thank him for his great advocacy for the College of Engineering during the bond marketing phase, his company's strong record of recruiting College of Engineering and IEP graduates, and his advocacy for the IEP and foreign language education in R.I.



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Left to right: Rolf-Dieter Schnelle, Provost DeHayes, Angus Taylor, Dean Wright



Left to right: Rolf-Dieter Schnelle, President Dooley, Angus Taylor

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## IEP Awards and Recognition

We would like to recognize and thank the following outgoing IEP board members for their enthusiastic service and leadership on the board over the last years:

**Laurie Burger** graduated from URI with a masters in Electrical Engineering and has been dedicated to hiring and mentoring our IEP interns and graduates. When at Schroff/Pentair she regularly hired our IEPers and held the record for several years as the single employer with the most IEP grads on staff! Laurie has also been a most reliable contributor to the IEP scholarship fund, and brought her significant marketing expertise to the first IEP strategic plan developed in 2009. Noteworthy are furthermore her outstanding presentations at several Colloquia.

**Mike De Ruosi** graduated from URI in 1975 with a degree in chemical engineering. He went on to work for the French company Rhodia where he became the President of its Novecare group. As a member of the IEP board, Mike helped place numerous French IEP students with Rhodia for their internships in France and hired them upon their return. Through his network of contacts, Mike has also helped connect the French IEP with other companies in France. To this day, Rhodia, now known at Solvay, is still one of the strongest corporate partners for the French IEP.

**Rolf Schuette** is finishing his term as Consul General of Germany in Boston. He actively promoted the IEP within New England schools and companies and also addressed the students of our 2013 German Summer School. He is moving on to his last three-year assignment in Marseilles.

In additon, we would like to thank **Erin Papa**, who will be leaving her position as Assistant Director of the Chinese Language Flagship Program by the end of this month to finish her dissertation in Education.

The IEP and the Chinese Language Flagship Program owe a debt of gratitude to Erin. She graduated as an alum of the German & Civil Engineering IEP in `01, and subsequently had a brief stint with the DEM as a Civil Engineer. Her experience in the IEP and year abroad, however, helped her realize her love for languages and traveling, which led her to pursue her masters in ESL; she did some of her teaching in Australia and later took a group of students to China, helping John Grandin launch the Chinese IEP. She started learning Mandarin and became the Coordinator, and later the Assistant Director, of the Chinese Language Flagship Program. Erin also left her mark by directing the R.I. Roadmap to Language Excellence Initiative, a grassroots movement to launch dual language immersion programs in RI K-12 classrooms. We have all benefited immensely from Erin's dedication to the students, and the expertise she brought to the IEP and the Chinese Language Flagship Program, and wish her the best of luck for her quest to become a dual language immersion educator!



## IEP Outreach Update 2014-2015

For the 2014-15 school year, IEP Coordinator Heather Price worked with six 5th-year IEP Student Ambassadors to do on- and off-campus outreach for the International Engineering Program. We kicked off the year by welcoming approximately 130 new freshmen into the program at our IEP orientation meeting in September.

IEP Ambassadors continued to share their study abroad and internship experiences with current and prospective students at URI events including EGR 105 class visits, the Study Abroad Fair, Open House Days in the fall, and Welcome Days for accepted students in the spring. They assisted directors with pre-departure meetings for students going abroad next year, accompanied the Coordinator at high school presentations and college fairs, and greeted prospective students to the IEP for personalized visits.

This year's IEP student ambassadors were: Kenneth Betzold (Spanish/German/Electrical Engineering) Chris Capuano (Spanish/Mechanical Engineering) Amandine Gatali (Spanish/Civil Engineering) Jack Heaslip (German/Mechanical Engineering) Katie Topp (German/Anthropology) Jonathan Young (French/Mechanical)

### School Visits and College Fairs Completed:

La Salle High School	Providence, RI	Heather Price, Ambassadors
Nashua North High School	Nashua, NH	IEP student Ambassador
Pioneer Valley Chinese Immersion School	Hadley, MA	Erin Papa, Heather Price
Falmouth High School	Falmouth, MA	Heather Price, Erin Papa,
		Ambassador
Beckwith Middle School STEM Night	Rehoboth, MA	IEP student Ambassadors
Narragansett High School Career Fair	Narragansett,	IEP Alums
	RI	
Be An Engineer Expo at White Plains High	White Plains,	Heather Price, Ambassador
School	NY	
All-County Architecture, Biomed &	Stamford, CT	Heather Price, Ambassador
Engineering Fair at Academy of Info Tech		
and Engineering (AITE)		
Chariho High School Career Fair	Wood River	Heather Price, Ambassadors
	Junction, RI	



Left: IEP Ambassadors Kenneth Betzold (Spanish/German/Electrical Engineering) and Jack Heaslip (German/Mechanical Engineering) presented at the Beckwith Middle School STEM Night



### Here is some positive feedback that we received about our Ambassadors:

Heather,

The guys did a fantastic job at our STEM night. They asked if I could forward any pictures of them, and this is the only one I have.

Please be sure they get a copy and again pass along my thanks for the great job they did.

Michael Kenny,

URI class of 1980

Hi Sigrid:

Just a quick note to give Jack Heaslip a GLOWING report as ambassador for IEP at URI!!! Jack made it for the second block and we provided an overflow audience for him in the lecture hall with students from AP Calculus, German, Spanish and Latin classes taking up every seat and then some. Jack made his PowerPoint presentation, then fielded a huge number of questions from the kids, who were really stimulated by what he had to say. The fact that he had taken Latin and French in high school and started learning German from scratch at URI, and that he has a job waiting for him in Friedrichshafen, all had great impact. After the presentation he offered to stick around and do it a second time, so we made it happen. He even stuck around to visit another AP Calculus class. All my colleagues made a point of coming by this afternoon to say what a great job he'd done, and how it had stimulated ideas and conversation that carried over well into class. And that was the objective: if nothing else, to make these kids think about combining language and technical expertise as a lucrative career option. Mission accomplished! Thanks so much for arranging for Jack to come. He gets one big smiley!



Mit freundlichen Grüssen,

Doug Guy



# **APPENDIX**

IEP Annual Report Page: 30

## **Student Profiles**

THE UNIVERSITY OF RHODE ISLAND INTERNATIONAL ENGINEERING PROGRAM

## Eli Lamothe: Inventing the Cars of Tomorrow



It's actually true. You won't find speed limits on parts of the autobahn highway in Germany. University of Rhode Island mechanical engineering student Eli Lamothe knows firsthand. He's driven it. In an up-and-coming Audi sedan.

Lamothe, from Warwick, R.I., spent the first half of 2014 interning at Audi's world headquarters in Ingolstadt, Germany. He served on the research and development team with sights set on toppling BMW as the world's leading luxury carmaker.

In a lab tucked among the sprawling Audi campus, Lamothe monitored data from sensors measuring airflow inside

a forthcoming Q7 SUV. Engineers wanted to determine if they could improve efficiency and reduce energy consumption by only ventilating the occupied seats. While the concept sounds simple, it's not. It's so complex that only Lexus has deployed the technology.

"I learned such a great deal that you just don't learn in the classroom," Lamothe says. "There are variables you don't think of and sensors you didn't know existed."

The team deployed hundreds of sensors throughout a full-size car parked in a climatecontrolled wind tunnel. Those sensors complemented ones already in the car. Lamothe wrote the energy equations to capture the data and analyzed the results. At the end of his paid internship, he presented to department directors.

Impressed with his work, Lamothe's boss wrote him a letter of recommendation and invited him for dinner at his home. Freshman year I joked it would be awesome to work for BMW or Audi," Lamothe says. "When the offer came I couldn't believe it."

Lamothe is likely the first URI engineering student to intern at the notoriously secretive company known for keeping its inventions close to the chest.

The Rhode Island native landed the internship through the University's International Engineering Program. The five-year program offers students simultaneous degrees in engineering and a foreign language. Besides mechanical engineering, Lamothe, 21, is pursuing a degree in German.

With the international experience under his belt, Lamothe hopes to find a career designing intricate ventilation systems for a global engineering company. Although the public takes ventilation for granted, keeping the climate comfortable in large buildings or sensitive facilities like hospitals is no easy task.

To do so takes perseverance and leadership. Lamothe says he strengthened those qualities while in Germany. His first time outside of North America placed him initially at the University of Braunschweig for a semester of study and then at Audi. In both places, the people around him spoke German and expected him to as well. In traversing Europe – he visited seven countries in all – he took on a planning role steering his friends though train systems and dining options.

## **Student Profiles**

## **Erik Simpanen: Science Fiction Medicine**

THE

UNIVERSITY OF RHODE ISLAND INTERNATIONAL ENGINEERING PROGRAM

To diagnose the diseases of tomorrow, doctors will rely on machines seen only on science fiction television. University of Rhode Island biomedical engineering student Erik Simpanen plans to help make today's science fiction a reality. By merging his interests in engineering, medicine and



Left to right: SIEPers Kenneth Betzold (ELE '15) and Erik Simpanen (BME '15) in Chile.

culture, Simpanen has big dreams of becoming a doctor spearheading the testing of novel medical equipment.

"It would be really cool to know exactly how the machine works and exactly how it interacts with the human body," Simpanen says. "There's a lot of fascinating equipment coming out and I want to be part of those inventions."

The 22-year-old from Coventry, R.I., has spent the past four years setting the foundation to do just that. In July 2014, he returned from five months in Chile interning at Novacare Medical, a distributor of medical equipment in South America. There, he served as the go-to engineer for salespeople fielding technical questions from customers.

Separately, Novacare executives asked him and fellow URI intern Kenneth Betzold to assemble plans for the company's first foray into manufacturing medical equipment. Simpanen pored through English-language manuals written by a Japanese parts maker and summarized them for his Spanish-speaking colleagues. He checked that the parts met a litany of government certification standards. By the end, he could articulate what it would take to source and assemble a vital signs monitoring device.

"That was a daunting task but I learned a lot," says Simpanen, who plans to draw on that knowledge during his fall 2014 medical imaging course.

Simpanen arrived in Chile as part of the University's five-year International Engineering Program, in which students simultaneously earn degrees in engineering and a foreign language. Besides biomedical engineering, Simpanen is pursuing a degree in Spanish. To immerse him in the language and the culture, he spent five months in northern Spain studying at the University of Navarra and living with students from Spain. He took classes in Spanish, tested his language skills at the grocery store and traveled across the country. Simpanen also took the opportunity to visit France, Germany, Italy, Portugal, Sweden and the United Kingdom. When his family came to visit, Simpanen ushered them around Europe and sought to persuade his younger brother to attend URI and its International Engineering Program. "I told him the program opens up millions of opportunities," Simpanen says.

Simpanen now has contacts with potential employers from around the world. He understands the idiosyncrasies of communicating across international borders and cultures. He knows colleagues in Spain will not return a 4 p.m. email from Chile until the next morning because of the time difference. He can predict when executives prefer emails in Spanish versus English and he's intimately familiar with reconciling various government medical device standards.

Besides landing a job, Simpanen hopes the unique experience sets him apart when applying for medical school. Ultimately, he says envisions serving in an international clinical setting evaluating equipment with real patients. "Medical schools like to see diversity in experiences," he says. "The URI engineering program and my international experience should do just that."



### Hicham Benjelloun: From Morocco To URI



Hicham Benjelloun (FIEP/MCE '15), right, and a friend at the Eiffel Tower in Paris.

Morocco wants to be the gateway to the African economy. But even with its proximity to Europe, political stability and millions of dollars poured into infrastructure, it lacks one thing: engineers. Morocco's education ministry wants to see at least 10,000 engineers graduate a year, but in a country where just 67 percent of people can read and write, meeting that goal has been a challenge.

Hicham Benjelloun wants to be one of those engineers. The Moroccan native traveled 3,500 miles to study at the University of Rhode Island seeking a world-class mechanical engineering education he could bring back home.

"Morocco is experiencing big development right now," Benjelloun, 23, says. "Yet, if I had stayed in Morocco for college I would not have grown as much as I wanted and have at URI."

Far from the soaring temperatures of Morocco, Benjelloun immersed himself in college and the United States. He adjusted to the cooler temperatures, explored the nearby beaches and joined intramural soccer. A lover of science and math, he enjoyed the engineering, calculus and physics courses. To fulfill a general education requirement he took French. That class would bring him halfway around the world again.

His French professor suggested Benjelloun join the International Engineering Program. Benjelloun, who already spoke French, Arabic and English, could benefit from the five-year program that offers simultaneous degrees in an engineering discipline and a foreign language. It also meant studying and interning abroad. Benjelloun didn't hesitate. He added a French major and signed up for the program. The program took him first to the University of Technology of Compiègne in France for a semester of study. Then he spent six months in Massy, France interning for CGG, an engineering firm specializing in geoscience that counts major energy companies among its clients.

Benjelloun worked with a team of engineers to develop piezoelectric sensors that work when analyzing conditions of rigid soil. The team tested more than 100 variations before settling on a design, which is pending a patent.

"It was the highlight of my academic career," Benjelloun says. "I can't wait to go back there and apply for a job."

He'll likely have little trouble passing a CGG job interview. His internship interview conducted in two languages – English and French – stretched more than four hours and involved three layers of management. At the end, the senior manager offered him the paid internship on the spot.

Benjelloun says he loves the work at CGG, the people and the chance to dig into international projects, maybe even in his home country. Eventually though he wants to return to Morocco armed with his international engineering experience.

"I always thought Morocco had the potential to be an amazing country," Benjelloun says. "I feel blessed having had the opportunity to discover new places and expand my knowledge. I have Morocco and my parents to thank for giving me the foundation to do that and I want to give back just the little of what they gave me."

## Commencement 2015: Degrees in Engineering, Chinese, Math Provide Many Options for URI Senior

Media Contact: Todd McLeish, 401-874-7892

KINGSTON, R.I. – April 21, 2015 – Alyssa Zisk took just five semesters to complete a bachelor's degree in mathematics at the University of Rhode Island. But after graduation she stayed on campus for a couple more years to complete degrees in mechanical engineering and Chinese and to study and work in China for a year.



CIEPer Alyssa Zisk (MCE '15). Photo Credit: Nora Lewis.

As the Sharon, Mass., resident prepares for her second URI commencement ceremony on May 17, Zisk is looking back proudly on a college career filled with accomplishments.

"I've always liked science and math, and when I started to learn Chinese in middle school, I wanted to reach a point where I could do my math and science and engineering in Chinese," she said. "I wanted to achieve a professional fluency."

Zisk said that she started taking Chinese language classes as a way of getting out of taking another English class in sixth grade, but once she started it, she found that she really enjoyed the language. "My dislike for English class had nothing to do with a dislike for languages," she said. Working through URI's Chinese Language Flagship Program, she achieved the "advanced high" level of proficiency in speaking Mandarin Chinese and reads at the superior level.

Enrolled in URI's International Engineering Program, Zisk spent a year abroad in China at Tianjin Normal University, taking Chinese language classes, living with Chinese roommates, and studying engineering in Chinese. It was her fourth trip to China, so she felt comfortable speaking the language. She even spent a semester as a teaching assistant in an undergraduate physics class at Tianjin's College of Physics and Information Technology.

That experience served her well when she returned from China and began teaching a precalculus course to undergraduates at URI. "I've liked math forever," Zisk said. "It lines up well with the way I think. Math is a study of patterns, and I think in patterns."

When she completed her math degree in the middle of her junior year, thanks in part to several advanced placement math classes she took in high school, she immediately enrolled in a graduate degree program in math. "I didn't want to be done taking math, so I kept taking classes and it's adding up to a master's degree," she said. "As far as math is concerned, I'm a grad student, even though I'm still an undergrad in everything else."

Zisk's math proficiency came in handy during a nanotechnology research project she conducted with mechanical engineering and chemical engineering professors. Their aim was to build a liposome – a tiny bubble made from the same material as a cell membrane – covered in a thin gold layer that can be useful in delivering drugs to targeted areas in the body. "I was the one who did the research to see how to do it, and then I ran the protocol in the lab to see if it would work," she said. "Then I handed the project off to another student to do the next steps."



Although her busy schedule of classes, research and teaching might lead you to believe she had no time for anything else, Zisk made sure that her college career was not all work and no play. She played on the women's ultimate Frisbee team – including a spring break tournament in Myrtle Beach, S.C. in March – competed on the club fencing team, served as secretary of the Society for Women Engineers as a freshman, and this year joined Rhody Hacks, the computer science club.

As she looks toward her future, she has several decisions to make. After completing her master's degree in math next year, Zisk plans to earn a doctorate in "something science or technology-ish, or maybe applied math."

And then what?

"There's a few different paths I could see myself going down," she said. "I could see myself teaching at some level or doing research in technology. I could also see myself doing research in pure math, or even work in industry somewhere. Who knows?"

## 2015 J-Term to Germany



Our Winter J-term Study Tour 2015 "Germany Today: Science, Technology & Culture" was organized by the German IEP and the German Section of the Department of Modern and Classical Languages at URI, funded by Max Kade and Van Meeteren Foundations and led by Dr. Sigrid Berka, the Executive Director of IEP; Anett Geithner, DAAD visiting lecturer at URI; and Shawna Rambur, lecturer of German at URI. We were a group of 17 undergraduate URI students – from freshman to senior and mostly participating in URI's International Engineering Program (IEP). We all shared a keen interest in Germany, the German language, culture, business, and research.

Left: Study tour participants with IEP alums Erik Anderson and Billy Machado at IAV in Gifhorn.

Places we visited:

Bundesministerium für Umwelt – BMUB

Maxim Gorki Theater

Mercedes-Benz

Lufthansa Technik

Desy Research Center - Helmholtz Gemeinschaft

Volkswagen AG

Bayer AG

TUBS - Technische Universität Braunschweig

Institute for Chemical and Thermal Engineering

Institute for Pharmaceutical Technology



Institute of Tool Machinery and Production Engineering

"During the trip we walked and took public transport throughout the four different cities we visited. Our tired legs were given strength by the majestic sights we came across. There was a constant sense of adventure and history everywhere we traveled. From the Brandenburg Gate and the Wall in Berlin to the Rathaus in Hamburg and the Dom in Köln we were always in step with the culture and history of Germany. Visiting the companies opened my eyes to the different possibilities that lay before an engineer. It was a great experience to look at Lufthansa Technik, Volkswagen, and TU Brauschweig. I greatly enjoyed touring the particle accelerator at DESY. The concept of using magnets to accelerate, or "beschleunigen", the electrons and protons was rather fascinating. I talked with the tour guide Paul and he said that interns would be more than welcome to work with the data for the summer. Meeting people is another reason why I believe this trip is in the best interest of students from all disciplines."

--Zachary Smith, Electric Engineering, German & Chinese Flagship IEP freshman

## 2015 J-Term to France

#### THE UNIVERSITY OF RHODE ISLAND INTERNATIONAL ENGINEERING PROGRAM

## URI students, professor march in solidarity with French citizens following attacks on magazine

Media Contact: Dave Lavallee, 401-874-5862

Students to share experiences during roundtable talk Feb. 11

KINGSTON, R.I.-- February 9, 2015 – University of Rhode Island French Professor Lars Erickson received a communiqué from the U.S. Department of State cautioning American citizens about participating in mass demonstrations after the massacre at the Paris satirical magazine, Charlie Hebdo.

Erickson, who arrived in Paris by train the day after the Jan. 7 attacks, considered the notice until he spoke with the four URI students traveling with him as part of URI's J Term program, which allows students to take classes during winter break and to travel with professors for unique international experiences and academic credit.

"But my students said, 'We are here at a historic moment, and we want to take part in the Sunday (Jan. 11) rally," Erickson said. "I was deeply impressed that they wanted to express their support for free expression and the French people. Without a doubt, it was the most moving public event I have ever been a part of."

As Erickson and his students marched with the more than 1 million French citizens, he knew he made the right decision when he observed a conversation between one of his students and a local citizen.



FIEPer Ian Kanterman with the crowd behind him during the march in Paris on Jan. 11. Photo Credit: Ian Kanterman.

"This older French gentleman was asking my student, Ian Kanterman about his GoPro camera and how it worked," Erickson said. "He was telling Ian about the importance of the moment."

And then as the man finished his remarks, Kanterman, a URI French International Engineering Program student, shouted out, Liberté, Égalité, Fraternité, the slogan of the French Republic, which means Liberty, Equality and Brotherhood.

"The man was so pleased with Ian's response that he just beamed," Erickson said. "He was just so impressed that Ian said it in French with such passion."

"It was mind-blowing," Kanterman said, "to see so many people come together at once. My French was a bit broken, but everyone valued that we were speaking their language."

David Kehoe, a French International Engineering Program student and resident of Wakefield, said the walk started in a somber fashion. "What impressed me most was that people of all walks of life and religions were walking together. As I watched a typical French citizen walking next to a man in Muslim dress, I saw one sign, that said something like, "The attack is not part of Islam; it is blasphemy. "The trip to France started with a typical itinerary for a trip based on the goals of the International Engineering Program, a stay of three nights in Compiegne, France where the students toured the Université de Technologie de Compiègne, and local businesses. The class was open to any URI student but the target group was International Engineering Program students.

Then, the day after 12 people were gunned down at Charlie Hebdo, the group arrived in Paris. That day, five more French citizens died at the hands of terrorists before they were shot and killed by police.



## 2015 J-Term to France

"But overall, I felt very safe because of the security, and because that was a very targeted attack," Erickson said. "I didn't feel like a random attack was likely and my students felt the same way."

He added, however, that it was a bit unsettling seeing all of the security personnel out in such large numbers armed with semi-automatic weapons.

When the students and Erickson joined the rally, they weren't close to the start but he said there "was this wall of people moving through the street. It was an odd mixture of somber reflection and joyous celebration. There was the acknowledgment of the horrible loss of life, but almost a sense of victory that the terrorists had been killed.

"People would just start clapping together, and pretty soon, the entire rally was clapping as one. It was as profound a sense of unity as I have ever felt."

And he said he could not be prouder of his students.

"They were great diplomats," Erickson said.



Left: A man carries a little girl on his shoulders holding a sign that says, "I am Charlie" during the march in Paris. Photo credit: Ian Kanterman.

## 2015 J-Term to Chile

#### THE UNIVERSITY OF RHODE ISLAND INTERNATIONAL ENGINEERING PROGRAM

### **Reflection on the J-Term to Chile**

### By Craig Smith

Having studied the language and culture of Spanish-speaking countries for most of my schooling, I developed a great interest in traveling and experiencing these cultures first hand. I wanted to continue my study of the Spanish language in my college career, and the International Engineering Program offered by the University of Rhode Island played a great role in my college selection process. Naturally, when I learned of the amazing study abroad opportunities afforded by the J-Term program, I was very



interested in attending a brief engineering course abroad and experiencing a new country. I decided for the newly organized trip to Valparaiso, Chile, where I could both complete a professional engineering elective towards my major and get some great language and culture immersion to help me with my Spanish skills. Upon being accepted to the program, I became very excited and realized that I would soon be on an unforgettable 2-week trip with a group of my peers.

I really did not know a lot about Chile before the trip, it is rarely in the news in the U.S. and all I knew about the country was learned from a brief period of research looking through the Chilean news websites and from looking at pictures of the area. This would be the farthest I have ever traveled from home and I did not realize at the time how much I would learn about Chile in my short stay, and how much it would broaden my world view. One thing I did know, as I was informed by my mother a few years ago, was that I had a very special reason to travel to this specific city in Chile. In my mother's genealogy research, she discovered that my five-time great grandfather William Christopher was buried in the dissident's cemetery in Valparaiso.

Captain of the Forecastle of the U.S. Frigate Essex, William was just off the coast of Chile in the bay of Valparaiso with the rest of a U.S. fleet aboard the Essex, which was severely damaged from a previous conflict, when they were attacked by a British fleet and captured during the war of 1812. The U.S. fleet suffered heavy casualties, and William Christopher was severely wounded. 153 of the 255-man crew of the Essex were killed, missing, or wounded by the end of the encounter and the ship was captured by the British. William died of his wounds several days later and was buried in the dissident's cemetery.

Now more eager to visit Valparaiso than ever, the day of departure came and I flew into Santiago where I met up with the rest of the students and faculty, Dr. Vinka Craver and Silke Scholz, to take a van ride the rest of the way to Valparaiso. Flying in, I caught glimpses of the snowy Andes, before passing into the very arid cactus-covered hills of Santiago. Shortly after departing from the airport in our van we stopped into a "gas station", which turned out to be very different than most of the gas stations in the U.S. because it included a large, fairly nicely furnished convenience store and an upscale fast food restaurant inside. Being inside this building and seeing our first store in Chile was a great first immersive experience for me because I saw prices of different products labeled in pesos and heard everyone speaking Spanish in a natural environment.

Looking through the convenience store shelves, there were many foods and beverages I had never seen before, such as different brands of candy like Rocklets and Super 8, which I would have called M&Ms and Kitkats in the U.S. There were some familiar brands however, such as Gatorade, Coca-Cola, and Fanta, however there were some new flavors I never knew about and they were all of course labeled in Spanish. Through seeing this first store and by eating in restaurants throughout the trip, I also quickly learned that unlike restaurants in the U.S. tap water is not commonly served, and instead you will be asked every time if you want a glass bottle of carbonated ("con gas") water or still water ("sin gas"). These were just some of my first impressions, but I have to say that observing many of the differences and similarities between everyday life in the U.S. and Chile really enriched the experience I had throughout the trip.

## 2015 J-Term to Chile

When we finally approached the outskirts of Valparaiso, I immediately noticed that the area was much more densely settled than before, and colorful graffiti covered the buildings. The narrow streets were filled with people going about their daily business and several stray dogs. When our van finally stopped on Cerro Alegre (meaning "happy hill") and I stepped out, I was struck by the quiet, relaxed atmosphere of this city. It was certainly a large contrast from the busy airport. Our hostel, the mm450 Hotel Boutique, was a quaint, old wood floored hostel, but with modern furnishing and amenities. The group bedrooms were plain but comfortable, and the sitting areas including the open air courtyard made the hostel even more enjoyable. Delicate breakfasts of squeezed juice, local fruit, yogurt and fresh bread were prepared each morning by the friendly staff and were excellent. The first night in Valpo was amazing; we got to dine in a local restaurant



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> and start to see some of the city and night life. I must say I was never disappointed by the cuisine in Chile, rather, I was blown away every time. Chorillanas, empanadas, chapurritas, porotos, reineta, congrio, and the occasional pisco sour or Chilean wine were some of the classic Chilean staples I was able to try that I had never heard of and never would have without embarking on this incredibly eye-opening trip. We enjoyed our stay for the first week of the trip at the mm450 Hotel Boutique, but unfortunately Wi-Fi connectivity issues forced us to move to a new hostel, as we needed internet to complete our class work.

> The second hostel we boarded in was equally hospitable and even had a rooftop ocean view bar overlooking the bay of Valparaiso. A platform just above it afforded us one of the greatest panoramic views of the entire city. From the bar seating we could see the port operations of the city to the left, full of cranes, cargo ships and shipping containers, which was brightly lit at night. Anchored just a little farther out were several

grey battleships from the nearby Chilean navy base. Directly across the bay was Concón, a large city with numerous white high rises precariously perched on oceanside cliffs. To the right was the similarly highly developed Viña del Mar region with great beaches. Up the short ladder onto the actual roof of the bar on the viewing platform, you could see all of this and the rest of the city that completely surrounded us. The amount of houses and buildings built into the steep hills (los cerros) is awe-inpiring. Thousands of structures squeezed into a mountain was simply unlike anything I had ever seen, and I could not stop staring at the city in wonder. At night there were more lights dotting the hills than stars in the sky.

Perhaps the most memorable sight for me however, was the dissident's cemetery that could be seen just a short distance from the rooftop of the hostel. I could just barely pick out the white U.S.S. Essex memorial stone that marked where my great grandfather William and his fellow sailors lay. On my first attempt to visit the cemetery, I discovered that it was closed; locked with at least two guard dogs inside. A few days later I tried again in the morning with a fellow student and it again appeared to be locked, but a couple of men and women in front of us reached through the wrought-iron gate to unlock it. I was already inside when I remembered the vicious guard dogs from before, but luckily they never presented themselves. After some looking around we finally found the Essex memorial. A friend of a relative of mine had visited the site years ago and pleaded that the memorial be cleaned and restored. It must have worked, because the over 200 year old white stone monument was in pristine condition and easy to read. After a little while looking I found William Christopher's name on one side, among many others who lost their lives in the battle. It was a unique feeling to realize that I was now standing at the resting place of my great, great, great, great, great, great grandfather. After looking all around the monument and saving a short prayer, we returned to the hostel to start our day. Whenever I was up on the roof of the hostel I found myself looking over to the cemetery, thinking of my ancestor, imagining the battle, what the area may have looked like, and what life may have been like so long ago.

## 2015 J-Term to Chile

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The Pontificia Universidad Católica de Chile where our classes were held was a beautiful old stone structure with a modern interior and a hospitable staff. On our first day there we had a brief tour and orientation, and ate lunch in the school's cafeteria. One thing I noticed is that coffee or espresso is offered after every meal in some places such as the school, while usually coffee is consumed solely in the morning in the U.S. and sometimes at night. The course itself was very interesting to me and taught about different ways that clean energy can be harnessed from food and animal waste and other methods that are not commonly talked about in the U.S. The lecture focused on how these cheap solutions for sustainable energy could be used to help developing communities manage their waste and get energy, and our class culminated in a design proposal for an anaerobic digester to be constructed at a local fish market to dispose of fish processing waste and create free natural gas. Our class was accompanied by simple lab sessions where we learned about wastewater treatment methods and how to analyze the purity of different samples using centrifuges and heating ovens to separate solids out of the solution.

In addition to the Civil Engineering class, we were also required to complete blog entries summarizing the main points of each day, and the number of these blogs and some other work depended on whether or not you elected to take the Spanish class credits, which I did not. The course load during this J-term was light however, allowing us to also enjoy ourselves and soak in the language and culture of the city.

There was not a boring day to be had on the entire trip. Each day was jam-packed with unique and fun activities for us to do and to see historical and culturally significant parts of the city and try genuine cuisine from the area. Some of the highlights included: A very interesting tour of one of the homes of famous Chilean poet Pablo Neruda on La Isla Negra, beach horseback riding tour, a historical tour of Valparaiso, dune boarding (snowboarding with sand), a day at Viña del Mar and its beaches, several engineering company visits, a trip to the U.S. Embassy and Palacio de la Mondeda (President's House) in Santiago, and an overnight trip to Santa Cruz and Colchagua to visit the Colchagua museum of Chile's history, and a sustainable energy powered "off the grid" home that was relevant to our anaerobic digestion engineering class. It was also just fun to be in the city, plenty of shops to browse, places to see, and street performers and musicians were prevalent. While there was still room for some leisure time, we packed in all that we possibly could in two short weeks.

Overall the program was extremely well-planned and full of fun and unforgettable new experiences for all of us. The engineering class regarding sustainable solutions for developing countries and the included visit to the sustainable house was really eye-opening because it showed how low-tech solutions can be built to enable anyone to be energy self-sufficient and how we, as Americans in a very developed nation, take amenities like electricity, running water, AC

and heating for granted every day by living "on the grid". I learned so much about Chile in the short duration of our trip, and interacted with many people around the area. I can say that being immersed in the heart of the city, instead of some tourist resort, really gave me a new perspective and shifted my focus to a more worldly view. Instead of only paying attention to domestic news, I now also have a special interest in what is happening in South America. In addition to the friendships I have made with the students that went on the trip with me, I even have a few new friends now in parts of Chile and Brazil that I talk to occasionally. My stay in Chile really was unforgettable and life changing and someday I definitely will return.

