

BPCS

(Better Process Control School)

Combined with

Seoul National University

And

Washington State University

And

University of Idaho



SEOUL NATIONAL UNIVERSITY



WASHINGTON STATE
UNIVERSITY
World Class. Face to Face.

I . SNU and WSU

1. SNU (Seoul National University)

Seoul National University is a first national university established in 1946. Seoul National University honors the ideals of liberal education and aims to teach students a lifelong love of learning that will form the basis for continuous personal growth.

(<http://www.snu.ac.kr>)



1-1. History

1946	Government ordinance for the establishment of Seoul National University promulgated
1946	Seoul National University established (the Colleges of Agriculture, Commerce, Dentistry, Education, Engineering, Arts, Law, Liberal Arts and Sciences, Medicine, Graduate Division).
1950	Seoul College of Pharmacy, a private college, incorporated into the University as the College of Pharmacy.
1965	Graduate School of Business Administration established.
1967	Graduate School of Journalism and the Division of General Education Established.
1971	Graduate School of Private Law dissolved.
1975	All Colleges and Graduate Schools except for the College of Medicine and the College of Pharmacy, which remained on the Yongon-dong campus, and the College of Agriculture, which remained in Suwon, moved to the current Gwanak campus in February 1975.
1977	Office of Campus Construction established as part of the University's 10-Year-Plan for Campus Integration.
1995	The Program was developed into "Future Ideals in the 2000s", which was adopted in 1995 as part of efforts to become a "Graduate School-Centered International University."
2007	The "Long-Term Development Plan" was adopted in 2007 with clear visions in three stages

2. WSU (Washington State University)

Over the decades, Washington State University has developed a rich history. Founded on March 28, 1890, as the state's land-grant college by the Washington Legislature, WSU has grown from a single campus in Pullman into an internationally respected, multi-campus university today ranked among the top tier of American research institutions. (<http://www.wsu.edu>)



2-1. History

1892	The institution opening its doors with 59 students, under the name Washington Agricultural College and School of Science.
1895	Instruction beginning in what has become the College of Veterinary Medicine.
1926	The story of football player Butch Meeker, for whom the WSU Cougar mascot is named.
1957	Of Frances Penrose Owen as the first woman on the WSU Board of Regents.
1980	Eruption of Mount St. Helens, covering the campus in one-half inch of volcanic ash.
1986	Selection in 1986 of WSU biochemist Clarence A. "Bud" Ryan for membership in prestigious National Academy of Sciences, the first WSU professor so honored.
2001	Grand opening of Honors Hall in 2001, the new home of the nationally-acclaimed WSU Honors College, celebrating the college's 40th anniversary. WSU is ranked among the nation's top 50 public research universities.
2007	Elson S. Floyd taking office in 2007 as WSU's tenth president.
2008	\$25 million grant for School of Global Animal Health from Bill & Melinda Gates Foundation, largest in WSU history, in 2008.

3. UI (University of Idaho)

The University of Idaho is where students come to succeed and learn to lead. We've got exceptional learning opportunities, world-class facilities, an unparalleled residential community, and a statewide presence. The University of Idaho is accredited by the Northwest Commission on Colleges and Universities, which recognizes our compliance with its standards of higher education. Many of university of Idaho's schools, colleges, departments and programs have separate accreditation as well. (<http://www.uidaho.edu>)



2-1. History

1889	The university was formed by the territorial legislature of Idaho.
1892	The University of Idaho opened its doors, when it welcomed about 40 students and one professor, John Edwin Ostrander.
1896	The university graduated its first class when four students marched across a stage to receive their diplomas. Two years later, the university awarded its first graduate degree.
1899	A growing body of University of Idaho alumni formed the Idaho Alumni Association.
1906	The Administration Building fire was a turning point in the university's history. John Tourtellotte, a Boise architect who had designed the state's capitol, designed a new Tudor Gothic structure to symbolize the university's growth and maturity as a major institution of higher education. The Administration Building remains the centerpiece of campus.
1908	The hiring in 1908 of the nation's premier landscape architects, Olmsted Brothers of Massachusetts whose firm's founding father designed New York's Central Park, led to the small-town New England look of the campus.
1911	President Theodore Roosevelt was the first U.S. president to visit the campus. He planted the first tree in Presidential Grove
1976	The new ASUI-Kibbie Dome won a national engineering structural achievement award. Its sound structure has withstood roaring cheers of Vandal fans ever since.
Today	The university is home to nearly 12,000 students and nearly 3,159 faculty and staff. It continues to be a leading place of learning in Idaho and the West, because although it is ever-responsive to the changing needs of its students and society, it never forgets its roots and traditions.

II. BPCS (Better Process Control School)

1. Aim

The BPCS aims at training participants in the practical application of Good Manufacturing Practices (GMPs) for thermal processing operations, acidified foods, aseptic canning, container closure evaluation and other pertinent food processing operations. Therefore, our ultimate aims are to support Korean food companies through training the expert in food processing and improve food safety level in Korea.

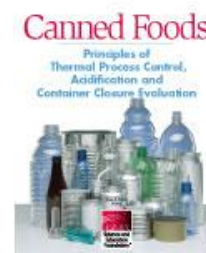
2. BPCS program in SNU and WSU

No.	Subject
1	Introduction
2	Microbiology of Thermally Processed Foods
3	Principles of Acidified Foods
4	Principles of Thermal Processing
5	Principles of Food Plant Sanitation
6	Food Container Handling
7	Records and Recordkeeping
8	Equipment, Instrumentation, and Operation for Thermal Processing Systems
9	Still Steam Retorts
10	Still Retorts Processing with Overpressure
11	Hydrostatic Retorts
12	Continuous Rotary Retorts
13	Batch Agitating Retorts
14	Aseptic Processing and Packaging Systems
15	Closures for Double Seamed Metal and Plastic Containers
16	Closures for Glass Containers
17	Flexible and Semi-Rigid Containers

3. Teaching materials

Canned Foods

- Principles of thermal process control, acidification & container closure evaluation (7th edition)




4. Instructors

No	Name	Occupation	phone number E-mail address	Career	subject
1	Barbara Rasco	Professor	+01-509-335-1858 rasco@wsu.edu	School of Food Science, Washington State Univ., Pullman, WA. (1998-present)	Food defense, Food law, Food safety, and Food processing
2	Gleyn E. Bledsoe	Professor	+01-206-612-6980 gleyn@live.com	College of Agricultural and Life Sciences, Idaho Univ. (2010-present)	Agricultural Economics and Rural Sociology
3	DH Kang	Professor	+82-2-880-2697 kang7820@snu.ac.kr	College of Agricultural and Life Sciences, Seoul National Univ. (2011-present)	Food safety, Control and detection of foodborne pathogens, and the application of HACCP plans
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4-1. Instructors' resume


4-1-1. BARBARA RASCO

	Name	Barbara Rasco		
	Affiliation (origin)	Washington State University		
	Position	Associate Professor	Nationality	USA
	E-mail	rasco@wsu.edu	Phone	+01-509-335-1858
	Subject	Food defense, Food law, Food safety, and Food processing		
Education	JD 1995 Seattle University/University of Puget Sound. Licensed to practice in the State of Washington. Admitted to practice in federal court.			
	PhD 1983 University of Massachusetts. Food Science and Nutrition. Minor in food engineering.			
	BSE 1979 University of Pennsylvania. Bioengineering (biochemical engineering). Minors in chemical and instrumentation engineering.			

Employment	<p>1998 – present Professor, Department of Food Science and Human Nutrition, Washington State University, Pullman, WA.</p> <p>1984-1998 Assistant and Associate Professor, Institute for Food Science and Technology, College of Ocean and Fisheries Sciences, University of Washington, Seattle, WA.</p> <p>1993-1995 Law Clerk, Weyerhaeuser Corp., Tacoma, WA. Provide legal research on intellectual property, labor and employment, contract, real estate and environmental law issues.</p> <p>1984-1998 Professor, University of Washington</p> <p>1983 – 1984 Head Research Chemist and Quality Control Manager. Cargill Inc., Memphis, TN. Developed corporate training procedures and analytical methods for Milling Division.</p> <p>1982 – 1983 Biochemical Engineer. Cargill Research Dept. Biotechnology Section. Minneapolis, MN.</p> <p>1995-2012 International Economic Development Programs: Food safety training programs, industry technical assistance and small and medium enterprise development in Eastern Europe, Central Asia and North Africa.</p>
Awards and Honors	<p>2012- Scholar of 1000ren honor by Tianjin, China</p> <p>2005 Fellow, Institute of Food Technologists</p> <p>2004 Elizabeth Fleming Stier Award , Institute of Food Technologists for humanitarian service</p> <p>2011-2005 Distinguished Lecturer, Institute of Food Technologists on food law and food defense</p> <p>2011 Summer Institute for Women in Higher Education Administration, Bryn Mawr College, Philadelphia, PA</p> <p>1992 Undergraduate Teaching Award, College of Ocean and Fisheries Sciences</p>
Professional Activities	<p>2006-2009 Institute of Food Technologists, Professional Member, Global Food Policy and Regulation Expert Panel</p> <p>2006 Society of Sigma Xi; Who's Who in Technology Today; Who's Who Worldwide; Nutrition Information Network; Northwest Consumer Food Safety Council. Certified civil mediator (University of Idaho)</p> <p>1996-2000 (Chair 1998-1999) Executive Committee, Food Laws and Regulations Division, Institute of Food Technologists</p> <p>2004-2011 American Chemical Society, Professional Member; American Bar Association; Washington State (Recognition for pro bono service)</p> <p>1993-1998 (President 1997) King County, and Whitman County Bar Associations, World Aquaculture Association, Pacific Aquaculture Caucus, Pacific Fisheries Technologists</p>
Committee Services	<p>2009-2012 Trilateral Commission, US/Pakistan/Afghanistan. Trade Corridors Working Group. USDA FAS</p> <p>2005-present Executive Committee, Western Regional Aquaculture Association</p> <p>2001-2003 Chair, Seafood/Aquaculture Safety Center of Excellence of the National Alliance for Food Safety</p> <p>1998-2011 Institute of Food Technologists, Food Laws and Regulations Division</p> <p>1998-1999 Division Chair</p> <p>1995-2000 Executive committee</p> <p>2006-2011 Global Regulations and Policy Division</p> <p>2006-2010 Awards Committees (Fellows, Industrial Scientist) 2006 -2010.</p> <p>Associate Editor: Journal of Aquatic Food Product Technology International Journal of Aquatic Science International Journal of Chemistry Marine Resource Science, Journal of Ocean University of China</p>

Reviewer for	J. Food Science J. Aquatic Resource Development J. Food Protection Analytical Chemistry Applied and Environmental Microbiology Aquaculture Reviews Bioresources and Technology Comparative Biochemistry and Physiology Critical Reviews Food Science and Nutrition Food Reviews International International J. Aquatic Resources International J. Microbiology Trends in Food Science and Technology World Aquaculture Society	J. Agricultural and Food Chemistry J. Food Engineering J. Food Processing and Preservation Aquaculture Nutrition Bioprocess Technology Cereal Chemistry Food Reviews Food Microbiology LWT Thermochimica Acta Reviews in Fisheries Science Shellfish Research
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4-1-2. GLEYN E. BLEDSOE

	Name	Gleyn E. Bledsoe		
	Affiliation (origin)	College of Agricultural and Life Sciences, Idaho University		
	Position	Adjunct Professor	Nationality	USA
	E-mail	gleyn@live.com	Phone	+01-206-612-6980
	Subject	Agricultural Economics and Rural Sociology		
Education	Ph.D. 1995 Food Engineering, Aquaculture Engineering, University of Washington MS 1993 Food Science, University of Washington MBA 1973 Marketing and Management, University of Idaho. (AFIT Scholar/ Honors) BSE 1964 Logging Engineering (Forestry, Civil & Mechanical), Minor-Photogrammetry, University of Washington.			
Certificate Programs	2001 Alternative Energy Applications Training Program (Engineering), Texas A&M 1995 Better Process Control School 1992 UN/FAO Post Graduate Program: UN/FAO Fish/Animal Nutrition & Feed Technology. 1976 Certified Public Accountant			
Professional Appointments	2009-present Member United States/USDA Tri Lateral Commission for Afghanistan, Pakistan, and USA Trustee, Augala Reef Association, Western Samoa 2010-present Faculty- Department of Agricultural Economics & Rural Sociology, College of Agriculture & Life Sciences, University of Idaho			
Awards	2011 Recipient of the 28,000 member Institute for Food Science’s Bor S. Luh International Award for dedication to the international exchange of food technology ideas, a better international understanding of food technology, and successful, practical transfer of food technology to economically depressed areas 2004 Columbia River International Tribal Fish Commission –Spirit of the Salmon Education Award for directing and delivering training to Native American Fishermen on food safety and marketing for fresh, frozen, smoked and dehydrated and thermally processed foods			

<p>Professional Experience</p>	<p>Summary of consultancies and areas of expertise Food Safety/Protection, Agriculture including Pre and Post-Harvest Handling/ Processing; Agriculture Policy and Regulation, Planning, Production, Good Agriculture Practices (GAP) and GAP related programs Alternate Energy, Food Processing including Cold Chain, Thermal Processing and Dehydration, Fisheries/Seafood Harvest & Processing, Aquaculture; Agribusiness and Natural Resource, Land Management including Purchasing, Leasing, Allocation, Extraction and Regulatory Activities and Agriculture Extension/Extension Instructor Training</p> <p>Economic Development Construction/Project Management and Accounting, Small/Medium Enterprise Development, Governmental Policy and Regulation, Economics, International Trade and Marketing, including qualification for WTO participation for developing countries, Cost Accounting, Finance including Grant and Lending Programs, Strategic Planning, Business Planning, Organizational Management, Risk Management, Direct Assistance to Small to Medium Enterprises, Environmental Policy and Practices, and Sustainability.</p> <p>Food Processing and Marketing Post-Harvest Treatment and Processing, Food Safety (including Good Agriculture Practices, Hazard Analysis Critical Control Point (HACCP), Sanitation, Good Manufacturing Practices), Food Security, and Defense; Food Code, Law, Regulations and International Grades And Standards</p> <p>2010-Present University of Idaho: Faculty, College of Agricultural and Life Sciences, Director, Agricultural Trade Corridors Working Group, Afghanistan-Pakistan-U.S. Agricultural Trilateral Commission Training Program in Support of Capacity Development for Agricultural Trade in Afghanistan and Pakistan</p> <p>2009 Senior Technical Advisor, for the USAID Project for the Aquaculture, Cold Chain, Food Protection, Processing, Packaging and Green House value chain sectors in Azerbaijan</p> <p>2008 USAID Funded project to provide ISO17025 Technical Training</p> <p>2008 Jordan National Laboratory ISO17025 Training and Certification</p> <p>2006 - 2008 BearingPoint, McLean, VA Private Sector Development Manager, Jalalabad, Afghanistan</p> <p>2004 - Present Joint adjunct appointment as Professor, Institute for International Agriculture and the National Food Safety and Toxicology Center, Michigan State University</p> <p>1976-Present Certified Public Accountant specializing in Management Advisory Services to the fishing and seafood industries, financial institutions, agriculture businesses, forest products, food processing, manufacturing, technology, and small to medium sized businesses, non-governmental and governmental organizations with particular emphasis on corporate/business management, policy, strategic planning, marketing, financing including land and crop collateralization and program management</p> <p>2001 - 2005 Faculty (Agriculture and Graduate Schools) Washington State University</p> <p>1997 - 2001 Dean for Extension and Research; Director of National Indian Center for Marine and Environmental Research and Education and Director of the USDA Cooperative Extension Program</p> <p>1995-1997 Director, Institute for Food Science &Technology, Sheldon Jackson College, Sitka, Alaska while also serving on the Research faculty, Institute for Food Science & Technology, University of Washington</p> <p>1982-1991 President and Chief Financial Officer, of a fully integrated seafood harvest and processing company with annual sales in excess of \$70 million</p> <p>1960-1964 Engineer, U.S. Forest Service, Timber Cruiser and Engineer, Southeast Alaska and Washington State for private industry and government</p>
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Overseas Assignments	Afghanistan	Albania	Argentina	Armenia	Australia
	Azerbaijan	Bangladesh	Bolivia	Brazil	Bulgaria
	Canada	China	Chile	Colombia	Costa Rica
	Croatia	Denmark	Ecuador	Egypt	Eritrea
	Faroe Islands	France	Georgia	Germany	Ghana
	Greece	Greenland	Haiti	Honduras	Hong Kong
	Hungary	Iceland	India	Ireland	Israel
	Italy	Jamaica	Japan	Jordan	Korea
	Lebanon	Malaysia	Mali	Marianas	Mexico
	Morocco	Netherlands	Norway	Oman	Qatar
	Pakistan	Panama	Peru	Philippines	Poland
	Russia	Samoa	Scotland	Singapore	Somalia
	Sweden	Taiwan	Thailand	Tunisia	Turkey
	Turkmenistan	UAE	United Kingdom	USSR	Vietnam

4-1-3. DONG-HYUN KANG

	Name	Dong-Hyun Kang		
	Affiliation (origin)	Seoul National University		
	Position	Associate Professor	Nationality	USA
	E-mail	kang7820@snu.ac.kr	Phone	+82-2-880-2697
	Subject	Food safety, Control and detection of foodborne pathogens, and the application of HACCP plans		
Education	PhD 1997 Kansas State University, USA. (Dissertation title: "Controlling foodborne pathogens by <i>Pediococcus acidilactici</i> and Development of rapid detection methods") MS 1993 Seoul National University, Korea.			
Employment	2011-present Associate Professor, Seoul National University, 2010-2011 WCU Associate Professor , Seoul National University, Tenured Associate Professor, Department of Food Science and Human Nutrition Assistant Professor. Department of Food Science and Human Nutrition 2006-2011 Associate Professor, Washington State University 2000-2006 Assistant Professor, Washington State University 1999-2000 United States Department of Agriculture - USDA/MARC, Clay Center, NE Food Safety Research Microbiologist, Research focuses on control and detection of foodborne pathogens 1997-1999 Post-Doctorate, Kansas State University, Manhattan, KS, Research Associate. Program of Food Science. Research focuses on control and detection of foodborne pathogens 1994-1997 Kansas State University, Manhattan, KS Graduate Research Assistant, Food Science Program			
Awards and Honors	2007 Outstanding Research Award, CAHNRS, WSU 2006 IFT Samuel Cate Prescott Award. Orlando. FL, USA 2006 Appointed as Director for Detection Center of National Alliance for Food Safety and Security, USA			
Editorial Activities	2007-2009 Chief Editor for J. Rapid Methods and Auto. in Microbiology 2001-2007 Editor for Journal of Applied Microbiology 2001-2007 Editor for Letters in Applied Microbiology (2001- 2007) 2001-2003, 2008-present Editor for Food Science and Biotechnology 2008-present Editor for Journal of the Korean Society for Applied Biological			

	<p>Chemistry</p> <p>2008-present Editor for Korean Journal for Food Science of Animal Resources</p> <p>2003-2009 Editorial Board for Journal of Food Protection</p>
Committe Services	<p>2012-Present Expert Advisory Committee - Korea Food and Drug Administration, Food Standardization Depertment</p> <p>2012-Present Technical Advisory Committee - Korea Livestock Products HACCP Accreditation Service</p> <p>2011-Present Editing Secretary of English Journal of Korean Society of Food Science and Technology</p> <p>2010-Present Ambassador of Korea Foundation for the Advancement of Science and Creativity</p> <p>2009-2011 Honorary Researcher of Rural Development Administration</p> <p>2008-2009 President of KAFTA</p> <p>2005-2008 President of NW area- KSEA</p> <p>2005-2007 Vice President of KAFTA</p> <p>2003-2005 Vice President of Northwest KSEA group</p>
Memberships	<p>1996 - present Institute for Food Technologists</p> <p>2000 - present International Association for Food Protection</p> <p>1996 - present American Society for Microbiologists</p>

Program Schedules (May 6- May 9 , 2013)

Time	Day 1 (May 6, 2013)	Day 2 (May 7, 2013)	Day 3 (May 8, 2013)	Day 4 (May 9, 2013)
8:00~9:00	Registration (8:00~8:15) Presentation by food and Drug Administration (8:15~9:00)	Welcome back (8:00~8:15)	Welcome back (8:00~8:15)	Welcome back (8:00~8:15)
9:00~10:00	Chapter 1 Introduction (9:00~10:00)	Chapter 6 Food Container Handling (8:15~10:00)	Chapter 9 Still Steam Retorts, Continued (8:15~10:00)	Chapter 16 Closures for Glass Containers (8:15~10:00)
10:00~11:00	Break (10:00~10:15)	Break (10:00~10:15)	Break (10:00~10:15)	Break (10:00~10:15)
11:00~12:00	Chapter 2 Microbiology of Thermally Processed Foods (10:15~12:00)	Chapter 7 Records and Recordkeeping (10:15~12:00)	Chapter 10 Still Retorts Processing with Overpressure (10:15~12:00)	Chapter 14 Aseptic Processing and Packaging Systems (10:15~12:00)
12:00~13:00	Lunch (12:00~13:00)	Lunch (12:00~13:00)	Lunch (12:00~13:00)	Lunch (12:00~13:00)
13:00~14:00	Chapter 4 Principles of Thermal Processing (13:00~14:45)	Chapter 8 Equipment, Instrumentation, and Operation for Thermal Processing Systems (13:00~14:45)	Chapter 15 Closures for Double Seamed Metal and Plastic Containers (13:00~14:45)	Chapter 3 Principles of Acidified Foods (13:00~14:45)
14:00~15:00				
15:00~16:00	Break (15:00~15:15)	Break (15:00~15:15)	Break (15:00~15:15)	Break (15:00~15:15)
16:00~17:00	Chapter 5 Principles of Food Plant Sanitation (15:00~16:45)	Chapter 9 Still Steam Retorts (15:00~16:45)	Chapter 17 Flexible and Semi-Rigid Containers (15:00~16:45)	Additional Section(s)* based upon participant interest (15:00~16:45)
	Wrap and adjourn (16:45~17:00)	Wrap and adjourn (16:45~17:00)	Wrap and adjourn (16:45~17:00)	Wrap and adjourn (16:45~17:00)

* **Chapter 11**- Hydrostatic Retorts, **Chapter 12**- Continuous Rotary Retorts, **Chapter 13** - Batch Agitating Retorts

6. Standard of Pass and Test Schedules

90% grade (Requisite for pass >70) 10% attendance

Tests will be given following the lecture and discussions of each chapter in the text. **Passing grade is 70% or more correct answers.** If a lower grade is obtained, the same exam can be retaken later in the day or the following day. All exams are closed book and proctored. Exams can be taken in either English or Korean.

To be certified as having successfully completing the course, one must attend the lectures/discussions and must pass the tests for the following chapters:

Chapter 2	Microbiology
Chapter 4	Principles of Thermal Processing
Chapter 5	Principles of Food Plant Sanitation
Chapter 6	Food Container Handling
Chapter 7	Records and Recordkeeping
Chapter 8	Equipment, Instrumentation, and Operation for Thermal Processing Systems

and one or more of the tests from:

Chapter 9	Still Steam Retorts
Chapter 10	Still Retort Processing with Overpressure
Chapter 15	Flexible and Semi-Rigid Containers

Each student who successfully passes sections of the basic course will have that noted on his or her course certificate. Other sections passed will be separately listed on the certificate.

If you fail to be certified at this School in any of the necessary areas/chapters, you may repeat the appropriate lectures and tests at any sponsored Better Process Control School in the future at no additional instructor fee charge. For more information about this and other courses, please contact Dr. D.H. Kang, address, email, mobile.

7. For More Information

For Program content and/or Registration information, contact

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