112th Founder's Day Exercises

Lehigh University

Sunday, October 14, 1990



About the Founder

Lehigh University was endowed with a specific purpose by its founder, the Honorable Asa Packer. Beginning life on a farm in Connecticut, he moved to Pennsylvania in 1822, apprenticed as a carpenter and became one of America's pioneer captains of industry. Later, he was a judge and a congressman. He helped open the anthracite fields of Pennsylvania, and later developed transportation canals and the Lehigh Valley Railroad that carried the coal to market.

Packer foresaw the great industrial development of America and was determined to provide leadership to solve its complex technical, social and economic problems. In 1865 he founded Lehigh University as an expression of faith in the value of professional education.

Asa Packer died May 19, 1879, and the first Founder's Day was held that fall. Founder's Day is customarily held on the second Sunday of October.

Program Notes

This Founder's Day ceremony continues the university's tradition of awarding diplomas individually to each degree candidate.

Candidates will be presented alphabetically according to their degree—bachelor's, master's and doctorate—and according to their college. Each candidate will be greeted on the dais by the university president, Dr. Peter Likins.

Members of the audience are requested to stand as the academic procession enters Packer Memorial Church, and are invited to join in the singing of the National Anthem and the University Hymn. At the conclusion of the exercises, members of the audience are requested to remain in place until all in the academic procession have left the church. The procession will continue informally to the University Green.

Any recording, other than photographs, of these exercises without university permission is prohibited. The university does not authorize or endorse any commercial recordings of this event.

National Anthem

O! say can you see By the dawn's early light, What so proudly we hailed At the twilight's last gleaming; Whose broad stripes and bright stars Through the perilous fight,

O'er the ramparts we watched Were so gallantly streaming;

And the rocket's red glare, The bombs bursting in air,

Gave proof through the night That our flag was still there.

O! say does that star-spangled banner yet wave.

O'er the land of the free And the home of the brave!

University Hymn

O God, our help in ages past, Our hope for years to come, Our shelter from the stormy blast And our eternal home.

Before the hills in order stood, Or earth received her frame, From everlasting Thou art God, To endless years the same.

A thousand ages in Thy sight Are like an evening gone; Short as the watch that ends the night Before the rising sun.

O God, our help in ages past, Our hope for years to come, Be Thou our Guide while life shall last, And our eternal home.

About the Music

University organist Kim Heindel holds degrees from Westminster College and the New England Conservatory. He has studied organ with Joan Lippincott and Yuko Hayashi, and harpsichord with John Gibbons and Albert Fuller. He has performed with the Waverly Consort, the Philadelphia Orchestra, Concerto Soloists of Philadelphia, and numerous ensembles in the Philadelphia area. He also enjoys a varied career as both harpsichordist and organist.

The Philadelphia Brass is comprised of Brian Kuszyk, trumpet; Martin Webster, French horn; Grant Moore II, tuba; Timothy Soberick, trombone; Lawrence Wright, trumpet.

Performing several times each week on community and college concert series and at regional arts festivals, the Philadelphia Brass also offers programs designed specifically for children. In addition to their highly acclaimed concert performances they are sought after for their outstanding workshops for music students at all levels and for programs in elementary schools which introduce pupils to the brass instruments and to music in general.

Awarded the highest prize given to any American group in the 1989 Rafael Mendez Brass Quintet Competition...active residencies at Elizabethtown College, historic Christ Church in Philadelphia, and First Presbyterian Church in Bethlehem... annual performances at the Bethlehem, (PA) Musikfest...record regularly on the Shawnee Press label.

Known for their sophisticated and engaging programming, the Philadelphia Brass exhibits their virtuosity from the magnificence of the Renaissance, to the bold dynamics of contemporary sounds, to popular American music. To satisfy specific concert needs, the Brass also expands to a larger ensemble which may include percussion, organ, and chorus.

Packer Memorial Church

The Founder's Day ceremonies that commemorate the death of Asa Packer in 1879 have been held, with a few exceptions, in the church his daughter, Mary, built in his memory.

The striking church was designed by the noted architect Addison Hutton and was completed in 1887. Among its many features of beauty is a stained glass window depicting Christ teaching the elders in the temple in Jerusalem; it is attributed to Louis Comfort Tiffany.

The setting for the church's magnificent architecture has been enhanced by the completion in 1985 of an entrance court designed in overlapping geometric designs. The court is constructed of limestone selected to match the design of the church, and is paved in Pennsylvania bluestone accented with red Vermont slate. Illumination is provided from four cast iron lampposts similar in design to those found in historic Bethlehem. The entrance court was given in honor of Michael Bear Wood by his parents, Mr. and Mrs. M. W. Wood.

The court is part of a substantial renovation of the church begun several years ago. Recent work has included cleaning of the exterior stonework, the red slate roof, and the copper trim. In addition, stained glass windows have been cleaned and repaired and covered with a transparent protective layer.

Order of Exercises

THE PROCESSIONAL The Philadelphia Brass

Kim Heindel university organist

THE INVOCATION The Reverend Lloyd Steffen university chaplain

THE NATIONAL ANTHEM the audience participating

INTRODUCTORY REMARKS Peter Likins president of the university

THE FOUNDER'S DAY ADDRESS J. Richard Aronson professor of economics

CONFERRING OF HONORARY DEGREES

RECENT APPOINTMENTS TO ENDOWED PROFESSORSHIPS

CONFERRING OF DEGREES Peter Likins

THE UNIVERSITY HYMN the audience participating

THE BENEDICTION Chaplain Steffen

THE RECESSIONAL The Philadelphia Brass

Honorary Degrees

The candidates will be escorted to the podium, and then presented by Alan W. Pense, provost and vice president

DOCTOR OF HUMANE LETTERS Bernard L. Cohen

DOCTOR OF SCIENCE Luther W. Brady, M.D.

Founder's Day Officials

Mace Bearer

Nicholas Balabkins professor of economics

University Marshal

Raymond Bell professor of education

Chief Faculty Usher

Fred Stein professor of chemical engineering

RECEPTION Immediately following in the Asa Packer Dining Room, University Center.

Officers of the University

Board of Trustees Officers of the Board

William C. Hittinger chairman

John W. Woltjen corporate secretary and treasurer

Richard H. Sanders assistant treasurer

Robert M. Holcombe executive secretary

Elmer W. Glick honorary secretary

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Appointed Trustees

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University Administration

a list of principal officers

Peter Likins president

Alan W. Pense provost and vice president

John W. Woltjen vice president for administration and treasurer

Marsha A. Duncan vice president for student affairs

Michael G. Bolton vice president for development and university relations

Roy C. Herrenkohl vice provost for research and dean of graduate studies

Patti T. Ota vice provost for academic administration

Richard W. Barsness, dean College of Business and Economics

Fazil Erdogan, interim dean College of Engineering and Applied Science

James D. Gunton, dean College of Arts and Science

Alden J. Moe, dean College of Education

Anthony L. Corallo assistant vice president for facilities services and campus planning

Bruce Correll registrar

Faculty Recently Appointed Endowed Professors



D. Raymond Bainbridge was recently named Lehigh's first Coopers & Lybrand Professor of Accounting. The endowed position is supported by the international accounting firm of Coopers & Lybrand.

In 1984, Bainbridge received the Donald B. and Dorothy L. Stabler Award for excellence in teaching, Lehigh's highest university-wide teaching award.

Bainbridge joined Lehigh's faculty in 1972. He earned his master's degree at the university that same year and completed his Ph.D. at Lehigh in 1978.

Bainbridge, who has contributed articles to major accounting journals, has also chaired and served on numerous planning and educational policy committees at Lehigh. He is a member of the Pennsylvania Institute of Certified Public Accountants and the American Accounting Association.

He has also served on the Committee on Continuing Education, the Committee on Relations with Schools and Colleges, and the Committee on Relations with Bankers.

The Coopers & Lybrand Professorship is funded in large part by Lehigh alumni who work for the accounting firm.

"We are pleased to begin to repay the value of the education we received at Lehigh...and to see our support translated into such meaningful activities and programs as this professorship," said Ronald J. Murray, a senior partner with the accounting firm and a member of Lehigh's Class of 1956.



Mark H. Bickhard has become Lehigh's first Henry R. Luce Professor in Cognitive Robotics and The Philosophy of Knowledge. The endowed chair is funded by the Henry R. Luce Foundation, named for the founder of Time and Life magazines.

As Luce professor, Bickhard will seek to bridge the disciplines of philosophy, behavioral and neural biology, computer science, robotics and cognitive science.

Bickhard specializes in cognitive science, artificial intelligence, robotics, developmental psychology, philosophy of mind and knowledge, philosophy of science, and communication and language studies.

Before joining Lehigh's faculty earlier this year, Bickhard was professor of educational psychology at the University of Texas at Austin.

Bickhard holds a Ph.D. in human development, an M.S. in statistics and a B.S. in mathematics, all from the University of Chicago.

He is the author of three books: "Knowing Levels and Development Stages," "Cognition, Convention and Communication," and "On the Nature of Representation: A Case Study of James Gibson's Theory of Perception."

He has also contributed numerous articles and chapters to scholarly books and journals.

Of Biographical Interest



Today's speaker, J. Richard Aronson, is William L. Clayton Professor of Business and Economics and Director of The Martindale Center for the Study of Private Enterprise at Lehigh.

Aronson has received three Lehigh teaching awards since joining the university's faculty in 1965. They include the Lehigh University Award for distinguished teaching by a junior professor, the Stabler Award for mastery of his field and ability to communicate it to others, and the Deming Lewis Faculty Award, given by a 10-year reunion class.

Aronson, a former Rockefeller Fellow at Stanford, is a specialist in public finance. His articles have appeared in the Journal of Finance, National Tax Journal, Economic Journal, and Journal of Economic Literature. He is listed in "Who's Who in the East" and "American Men of Science."

In the early 1980s, Aronson founded Perspectives, the only university journal with a national distribution and articles written exclusively by students.

Among the committees and boards which Aronson has served or chaired are the American Economic Association, the American Finance Association, the Royal Economic Society, the Public Employee Retirement Study Commission of Pennsylvania, and the National Tax Association.



Luther W. Brady, M.D., who is receiving an honorary doctorate of science degree today, is one of the world's foremost oncologists, or specialists in the study of tumors.

At Hahnemann University in Philadelphia, Brady is Hylda Cohn/American Cancer Society Professor of Clinical Oncology and chairman of the department of radiation oncology and nuclear medicine.

Since joining Hahnemann in 1959, Brady has served as president of every major professional society related to his field, including the American Board of Radiology, the American Radium Society, the Radiological Society of North America and others.

In 1980, Hahnemann recognized Brady's achievements by establishing the Luther W. Brady Pavilion.

Hahnemann has won gold medals from several dozen different medical schools societies, including a dozen from foreign countries. He is listed in "Who's Who in America," "Who's Who in the World," "Who's Who in Frontier Science and Technology," "Who's Who in the Arts," "American Men and Women of Science" and "International Leaders in Achievement."

A graduate of George Washington University, Brady has also served as editor or associate editor of a dozen journals, including Cancer Research, Investigative Radiology, Gynecologic Oncology, and Soviet American Medicine.



Bernard L. Cohen, who is receiving an honorary doctorate degree in humane letters today, is a member of Lehigh's Class of 1936 who has contributed significantly to his alma mater and to the communities in which he has lived.

After 30 years as a retail jeweler, Cohen and his wife Berte Cohen founded Piercing Pagoda, which grew into the country's third-largest jewelry chain with more than 300 outlets. He retired in 1986 as chairman of the board and chief executive officer.

Cohen received the Lehigh University Alumni Award in 1986, the Cities in Schools High Touch Award in 1988, and the Comenius Award from Moravian College (his wife's alma mater) in 1989.

The Cohens have endowed professorships in international relations at Lehigh and in English and English Literature at Moravian. They have also endowed an international relations lecture series at Lehigh and an arts and lectures series at Moravian.

During his 40 years in Bethlehem, Cohen served with the Bethlehem United Way, the Downtown Bethlehem Association, the Bethlehem Chamber of Commerce and the Boy Scout Council.

In his 14 years in Baco Raton, Fla., Cohen has served on the Planned Parenthood Board, the South Palm Beach County United Way and the executive board of Florida Atlantic University Foundation. In medieval times, caps, gowns, and hoods were forms of clothing that distinguished clerical and academic groups from the laity. Through the centuries they have been retained for this purpose, and have been modified in cut and color to indicate level of attainment within the various major branches of knowledge.

The traditional costumes were used in few universities in America prior to 1880, but with the enormous and rapid increase of both the number and size of colleges and universities that took place here in the nineteenth century, it became necessary to codify the use of academic regalia. Accordingly, in 1893, under the leadership of authorities of several eastern institutions, an intercollegiate commission was formed. The designations made by that commission have been agreed to by practically all American colleges and universities, and are essentially in force today.

In general, it may be said that all three parts of the costume—the cap, gown, and hood—indicate the required differences. Three factors must be taken into account: the degreebachelor, master, doctor; the branch of knowledge—arts, science, engineering, law, etc.; the institution that granted the degree.

The doctor is entitled to wear the gold cord with tassel on the cap.

The gown of the doctorate is generally black, preferably of silk, open in front, with full, round sleeves that are barred in either black velvet or velvet of the color used to designate the branch of learning in the hood. The master's gown, according to the code, is of black silk or wool, and has long sleeves with a slit in the upper part of the sleeve end. The bachelor's gown, open or closed, has a long round or pointed sleeve.

In American academic processions one often sees the brilliant scarlet of a British university. The British system of designation permits the use of scarlet silk for the full-dress gown of several doctorates. A trend among American universities in recent years is to authorize use of a specially designed academic regalia—a gown of the college's color, rather than black.

The hood, fastened at the throat and suspended from the shoulders, affords the fullest opportunity for the use of color. Linings, usually of silk, are indicative of the college or university by which the degree was granted. In most cases the official college colors are used. For example, the Stanford hood is cardinal red. Where there are two colors, one is generally arranged as a chevron upon the other; Lehigh's hood is brown with white chevrons. The velvet trim of the hood indicates the major field of knowledge. Finally, depending upon the degree, the cut and size of the hood vary.

MAJOR FIELD	HOOD TRIM
Arts and Letters	White
Laws	Purple
Philosophy	Dark Blue
Science	Golden Yellow
Art and Architecture	Brown
Medicine	Green
Engineering	Orange
Education	Light Blue
Business	Drab
Economics	Copper
Theology	Scarlet
Journalism	Crimson
	Peacock Blue

Degrees in Course

College of Arts and Science

Candidates will be presented by James D. Gunton, dean of the college

Eric John Abel B.A. – German

Richard Harrison Childress B.A. – Architecture

Donald Scott Crouse B.A. - Urban Studies

Brian Henry Cuff B.A. - Architecture

Pamela Jane Freidenrich B.A. - Biology

Nancy Maria Gagne B.A. - Government

Stacia Elizabeth Horvath B.A. - International Relations

Susan Kay Knoblauh B.A. - History

Steven J. Kurtz B.A. - English

Patricia Louise Larkin B.A. – Economics

David R. Madeo B.A. - Computer Science

Hemantha Kumar Parvatharaj B.A. – International Relations

Gerald Bauer Randall B.S. in Statistics Glen Alexander Robertson B.A. – History

Deniz Savas B.A. – Economics

Scott Collins Switzer B.A. – Economics

Peter David Tlapa B.A. – English

Eduardo Vallarino Arana B.A. - Architecture

Christopher John Weltzien B.A. – English

MASTERS DEGREES

Mary Katherine Boland M.A. - English

Alois M. Himsl M.S. - Chemistry

Eric Carl Johnson M.S. - Psychology

David Robert Leight M.A. - English

Raphaelina Shiut Lyn Loke M.S. - Applied Mathematics

Kathleen Elizabeth Marley M.A. – English

Bonnie Eileen McDonald M.P.A. – Public Administration

Carol Larzelere Stender M.A. – English

DOCTORAL DEGREES

R. Katherine Alpaugh

B.S., Pennsylvania State University

M.S., Lehigh University Ph.D. - Molecular Biology

Dissertation: Isolation, Purification and Characterization of the Human Luteinizing Hormone/Human Chorionic Gonadotropin Hormone Receptor

Portia Payne Belden

B.A., The University of Virginia

M.A., The College of William & Mary

Ph.D. - Psychology

Dissertation: The Interactive Relationship Between Mood and Memory

Thomas Michael Colbert

B.A., Kenyon College

M.S., Lehigh University

Ph.D. - Physics

Dissertation: Radiation Trapping and Collisional Processes in Alkali Vapors

Nancy J. Dodrer B.S., Albright College M.S., Lehigh University Ph.D. – Chemistry Dissertation: RGD Bearing Surfaces

Joseph James Fay B.A., East Stroudsburg University M.S., Lehigh University Ph.D. - Polymer Science and Engineering Dissertation: Effect of Morphology, Crosslink Density and Miscibility on IPN Damping Efficiency

John A. Gilly B.S., Indiana University of Pennsylvania M.S., University of Scranton Ph.D. - Molecular Biology Dissertation: Analysis of cDNA Integration into the Genome of Trichoderma Reesei Using Pulse Field Electrophoresis Emir Gurer

- B.S., Middle East Technical University, Turkey
- M.S., Middle East Technical University, Turkey

M.S., Lehigh University

Ph.D. - Physics

Dissertation: Configurational Metastability of Carbon-Donor Pair Defects in Electron-Irradiated Silicon

Tom W. Hawkins

B.S., University of Texas

M.S., Texas A&M University

Ph.D. - Polymer Science and Engineering

Dissertation: Preparation of Model Solid Rocket Propellant by Emulsification

Mark Francis Masters

- B.S., Moravian College
- M.S., Lehigh University

Ph.D. - Physics

Dissertation: Bound-Free Emission in Alkali Diatomic Molecules

Kim Lauren McKay B.S., East Stroudsburg University M.A., Lehigh University Ph.D. – English Dissertation: Narrative Voices in the *Bildungsroman*

John Anthony Stamatakos

B.A., Franklin and Marshall College

M.S., Lehigh University

Ph.D. - Geology

Dissertation: Paleomagnetism Applied to Tectonic Problems in South-Central Alaska and in the Central Appalachian Valley and Ridge Province

College of Business and Economics

Candidates will be presented by Richard W. Barsness, dean of the college

Hugo Fredrick Barth B.S. in Business and Economics Accounting

Nick J. Chini B.S. in Business and Economics Finance

Beth Gillian Cottingham B.S. in Business and Economics Finance

Mark Michael DiDonato B.S. in Business and Economics Marketing

Todd Christopher Ferber B.S. in Business and Economics Finance

Matthew Todd Garito B.S. in Business and Economics Accounting

Gordon Frederick Johnson B.S. in Business and Economics Economics

Jason Thomas Katsapetses B.S. in Business and Economics Management

Michelle Lee B.S. in Business and Economics Accounting/Economics

Brian John Murphy B.S. in Business and Economics Finance/Marketing

Gina Neri B.S. in Business and Economics Accounting

MASTERS DEGREES

Jeffrey Frederick Andrew M.B.A. – Business Administration

Vinit Kishore Asar M.B.A. – Business Administration

Naomi Sponsler Bechtold M.B.A. – Business Administration

Kevin Michael Cherry M.B.A. - Business Administration

Hervine Adolphy DaCosta M.B.A. - Business Administration

Amish Rohit Desai M.B.A. - Business Administration

James Dennis Gardner M.B.A. - Business Administration

Deborah Jean Gross M.B.A. - Business Administration

Dwayne L. Hansen M.B.A. - Business Administration

Robert Charles Helfrich M.B.A. - Business Administration

Lisa Jane Holczman M.B.A. - Business Administration

Hsin Hu M.B.A. - Business Administration

Theodore John Jeske M.B.A. – Business Administration

Dilip Maganlal Karani M.B.A. – Business Administration

Melanie S. Kenney M.B.A. – Business Administration

Trevor Christian Lewis M.B.A. – Business Administration Jui Ling Liu M.B.A. - Business Administration

Paul Thomas Lord M.B.A. – Business Administration

Anthony Joseph Mauro M.B.A. - Business Administration

Robert George Mentz M.B.A. - Business Administration

Michael Kevin Messer M.B.A. – Business Administration

Thomas Earl Mutchler, Jr. M.B.A. – Business Administration

Stephen Richard Pomraning M.B.A. - Business Administration

Elizabeth Barron Rosa M.B.A. – Business Administration

Richard F. Schmieg M.B.A. – Business Administration

Chin-hon Shiang M.B.A. – Business Administration

Brenda Lyn Truhe M.B.A. - Business Administration

William Robert Truhe M.B.A. - Business Administration

Roger W. Vidal M.B.A. - Business Administration

Clayton Paul Wagner M.B.A. - Business Administration

Alan Fong-I Yen M.B.A. – Business Administration

DOCTORAL DEGREES

Elizabeth Payne Patch B.S., Lehigh University M.S., Lehigh University Ph.D. – Business and Economics Dissertation: Causes of Employment Loss Due to Plant Closure in U.S. Metropolitan Areas

Linda Light Ravelle B.A., Pennsylvania State University M.B.A., Lehigh University Ph.D. – Business and Economics Dissertation: A Model of Revenue Bond Ratings for Water and Sewer Authorities in Pennsylvania

College of Engineering and Applied Science

Candidates will be presented by Fazil Erdogan, interim dean

Edward David Allen B.S. in Mechanical Engineering

Kirk David Aulenbach B.S. in Computer Science

Felipe Carrizosa Gelzis B.S. in Civil Engineering

E. Timothy Gorham, Jr. B.S. in Mechanical Engineering

Jon David Miller B.S. in Civil Engineering

Hassan Hussein Mustafa B.S. in Civil Engineering David Kenneth Patterson B.S. in Computer Science

Todd Duane Ramaly B.S. in Chemical Engineering

Scott Allan Robertson B.S. in Chemical Engineering

Edward Lane Robinson B.S. in Industrial Engineering

Nicholas Stamatakis III B.S. in Electrical Engineering

Amy Sue Urwiler B.S. in Civil Engineering

Davin Luther Yuknis B.S. in Electrical Engineering

Michael Brien Zalegowski B.S. in Mechanical Engineering

MASTERS DEGREES

Iyad A. Ajwa M.S. - Computer Science

Enver K. Aksu M.S. – Manufacturing Systems Engineering

Fazil Erwin Alfitri M.S. - Mechanical Engineering

Rajesh G. Ambwani M.S. - Manufacturing Systems Engineering

Ramesh Ananthakrishnan M.S. - Industrial Engineering

Peter Andonellis M.S. - Mechanical Engineering

Matthew Allan Bunner M.S. - Civil Engineering

Chun-Yu Chen M.S. - Electrical Engineering Peter John Chrisbacher M. Eng. - Industrial Engineering

Ravi Prabhu Dadlani M.S. - Manufacturing Systems Engineering

Himanshu B. Dani M. Eng. - Industrial Engineering

Glenn Peter Deppert M.S. - Civil Engineering

Vinayak Pandurang Dravid M.S. - Materials Science and Engineering

Andrew J. Dvorocsik M.S. - Industrial Engineering

H. Scott Fetterman M.S. - Electrical Engineering

Jun Steven He M.S. - Applied Mathematics

Felicia Garrett Herring M.S. - Electrical Engineering

Darin Leigh Hettich M.S. - Civil Engineering

Iconomos Antonios Koullias M.S. – Electrical Engineering

Wei Li M.S. - Chemical Engineering

Jen E Andrew Liao M.S. - Mechanical Engineering

Ta-Wei Lou M.S. – Mechanical Engineering

Jai-Liang Ma M.S. - Civil Engineering

Mark Morad Marvi M.S. - Electrical Engineering

Brant Frederick Matthews M.S. - Industrial Engineering Godfrey C. Muganda M.S. – Computer Science

Jihad George Nasr M.S. - Civil Engineering

Daniel John O'Connor M.S. - Civil Engineering

Sandra Elaine Olandt M.S. - Civil Engineering

Brendan William O'Malley, Jr. M.S. - Civil Engineering

Patrice Pierrat M.S. - Chemical Engineering

Steven Conlon Ragazzo M.S. - Civil Engineering

Anuradha Ramana M.S. - Civil Engineering

Malcolm Emanuel Ramsay M.S. – Chemical Engineering

David Grady Reinert M.S. – Manufacturing Systems Engineering

Monica Augusta Sardi M.S. - Civil Engineering

Laura Christine Stearns M.S. - Materials Science and Engineering

James E. Swain III M.S. - Mechanical Engineering

Jane Anne Swiderski M.S. – Materials Science and Engineering

Renzo Martin Vaccari M.S. - Industrial Engineering

Tajinder Singh Vohra M.S. – Manufacturing Systems Engineering Rebecca Jane Wilson M.S. - Computer Science

Patricia Ann Wolfe M.S. - Industrial Engineering

Yi Zhou M.S. - Civil Engineering

Yuewei Zhu M.S. - Civil Engineering

Michael Stephen Zwolinski M.S. – Materials Science and Engineering

DOCTORAL DEGREES

Mehmet Selim Akturk
B.S., Middle East Technical
University, Turkey
M.Sc., Middle East Technical
University, Turkey
Ph.D. - Industrial Engineering
Dissertation: A HierarchicalMultiobjective
Approach to Production Planning and
Scheduling Problems in Cellular
Manufacturing Systems

Charles Andrew Bateman B.Sc., University of Manchester/UMIST, England M.S., Lehigh University Ph.D. – Materials Science and Engineering Dissertation: Aspects of Precipitation in Mg Based Partially Stabilized Zirconias

Yaofeng Chen B.S., Taiwan University, Taiwan M.S., Lehigh University Ph.D. – Applied Mechanics Dissertation: Interface Crack in Nonhomogeneous Bonded Materials of Finite Thickness Vinayak Pandurang Dravid

B.Tech., Indian Institute of Technology, India

Ph.D. - Materials Science and Engineering Dissertation: Structure of Low Energy

Interphase Interfaces in the Directionally Solidified Eutectic of NiO-ZrO2 (CaO)

Jong-Shing Guo

B.S., National Taiwan University, Taiwan

M.S., Lehigh University

Ph.D. - Polymer Science and

Engineering

Dissertation: Polymerization of Styrene Oil-In-Water Microemulsions

John Scott Hawker

B.S., Texas Tech University
M.S., Texas Tech University
Ph.D. - Electrical Engineering
Dissertation: An Organization for Intelligent Robot Control

Jih-Mirn Jehng

B.S., Tung-Hai University, Taiwan M.S., Lehigh University Ph.D. - Chemical Engineering Dissertation: Niobium Oxide Catalysts: Synthesis, Characterization, and Catalysis

Thunshun Warren Liao

M.S., Lehigh University

Ph.D. - Industrial Engineering

Dissertation: Creep Feed Grinding of Alumina With Diamond Wheels

Orhan Norman

B.S., Middle East Technical University, Turkey

M.S., Lehigh University

- Ph.D. Electrical Engineering
- Dissertation: An Integral Equation Approach to the Periodic Steady-State Problem in Nonlinear Circuits

Enrique Quintero-Marmol-Marquez B.S., Veracruzana University, Mexico M.Sc., Monterrey Institute of Technology, Mexico Ph.D. - Chemical Engineering Dissertation: Optimal Operating Strategies and Inferential Control of Multicomponent Batch Distillation Agustin Rullan B.Sc., University of Puerto Rico M.Eng., Lehigh University Ph.D. - Industrial Engineering Dissertation: Vehicle Control Language: A Programming Language for Automated Guided Vehicles Anne Costa Solderitsch

- B.S., Allentown College of St. Francis de Sales
- M.S., Villanova University
- M.S., Lehigh University
- Ph.D. Information Science
- Dissertation: Temporal Process Nets: A Petri Net Method for Verifying Parallel Programs
- Kenneth William Tiedge
- B.S., Rutgers University
- M.S., Lehigh University
- Ph.D. Chemical Engineering
- Dissertation: A Study of Solid/Solid Interactions in Powders

Luan C. Tran

- M.A.Sc., University of Toronto, Canada
- B.S., National Institute of Technology, Vietnam
- Ph.D. Electrical Engineering

Dissertation: The Scaling of Submicron CMOS Devices

Qi Wang

- B.Eng., Jiaotong University, China
- M.Sc.E., University of New Brunswick, Canada

Ph.D. - Chemical Engineering

Dissertation: Mass Transfer Effects in Falling Film Evaporation of Ternary Mixtures Binghua Wu M.S., Lehigh University Ph.D. – Applied Mechanics Dissertation: The Surface and Through Crack Problems in Layered Orthotropic Plates

College of Education

Candidates will be presented by Alden J. Moe, dean of the college

MASTERS DEGREES

Daniel David Albright M.Ed. - Counseling

Rosemary Coyle Azzalina M.Ed. - Elementary Education

Nanci Ellen Bain M.Ed. - Elementary Education

Rebecca Lynne Benecke M.Ed. – Human Development

Frances M. Brailo M.Ed. - Secondary Education

Lauren Turnbach Brennan M.Ed. - Elementary Education

Jennifer Anne Bruce M.Ed. – Human Development

Stephen Leon Campbell M.Ed. - Special Education

Lisa D. Carril M.Ed. – Educational Administration

Laveena K. Chaudhari M.Ed. - Special Education

Yi-Nirng Lee Cheng M.S. - Educational Technology Kyungsun Hong Cho M.S. – Educational Technology

Tammy Lynn Cihylik M.Ed. - Special Education

Sarah C. Cloutier M.Ed. - Special Education

Gary William Donner M.S. - Educational Technology

Tanya L. Eckert M.Ed. - Human Development

Anthony William Favinger M.S. - Educational Technology

Anne Hochanadel Fessler M.Ed. – Reading

Susan Marie Gormley M.Ed. - Special Education

Judith Lynn Hoke M.Ed. - Reading

Ann Marie Koons M.Ed. – Reading

Martha Elaine Kuder M.Ed. - Elementary Education

Kristine Ann Lendvay M.Ed. – Reading

Susan Del Pilar Lozada M.A. - Education

Beth A. Mallon M.Ed. - Human Development

Jessie Elizabeth Martin M.Ed. - Elementary Education

Elizabeth McAndrew M.Ed. - Human Development

Rosemary Catherine McFee M.Ed. – Social Restoration Carol Lynne McGrogan M.A. - Education

Leslie Fay Merz M.Ed. - Elementary Education

Steven David Miller M.Ed. - Educational Administration

Karen Lynn Moyer M.Ed. - Secondary Education

Douglas George Muha M.Ed. - Counseling

Ann Cullen Munley M.Ed. – Elementary Education

Patricia Marie O'Donnell M.Ed. - Reading

Phyllis Ann Parkhurst M.Ed. - Special Education

Jay Marian A. Pike M.Ed. - Special Education

Gail Polzer M.S. - Educational Technology

Karen J. Reichard M.Ed. - Social Restoration

Cheryl A. Reinhard-Sarlo M.Ed. - Educational Administration

Dennis Joseph Rose M.Ed. - Educational Administration Danette Marie Sekerak M.Ed. - Secondary Education

Nancy Lynn Sherman M.Ed. - Elementary Education

Eliezer Daniel Skaist M.Ed. - Elementary Education

Mark Stephen Stoltz M.Ed. - Special Education

Susan Kristin Stoltz M.Ed. - Special Education

Dorothy Fisher Zeppenfelt M.Ed. - Social Restoration

DOCTORAL DEGREES

Christine Judith Rhoads B.S., Kutztown University M.Ed., Temple University D.Ed. – Educational Technology Dissertation: Knowledge Representation of Effective Schools

Graduation Honors

HIGHEST HONORS

Beth Gilliam Cottingham

Awards and Prizes

Alpha Pi Mu Prize – to a high-ranking sophomore with demonstrated interest in the industrial engineering curriculum Philip Joseph Brennan

- Alumni Association Junior Prize to the highest-ranking juniors in each undergraduate college Michelle Annette Minnick - Arts
 - and Science
 - Janet Temos Arts and Science Tanya Michele Atwood – Business and Economics
 - Michael J. Marsh Engineering and Applied Science
- Bethlehem Fabricators Award to a junior who has shown the most improvement in academic achievement over the sophomore and junior years James Justin Ost
- Robert W. Blake Memorial Award to the freshman who has completed one year of studies in the College of Arts and Science and is recommended by the college faculty as most outstanding in high scholastic achievement and in promise of leadership Terri Lynn Horowitz
- Nelson Leighton Bond Memorial Prize - to an outstanding sophomore on the basis of character, leadership, and scholastic achievement, but not financial need, in the College of Business and Economics Alison Rachel Cantor
- William J. Chandler Chemistry Prize to the highest-ranking student in each class in chemistry or chemical engineering
 Diane N. Hanczyc
 Kevin J. Klopfer
 Robert J. Kruklitis
 Denise M. Maloney
 Daniel P. McCormack
 Vicki A. Sciorra

- Class of 1904 Scholarship Award to an outstanding member of the junior class on the basis of character, scholarship, qualifications indicating promise of future leadership, and extracurricular activities Scott R. Emerman Timothy Frenz Maureen Menton Maria Moreyra Matthew Ruppel Kevin Worth Katrina Young
- Alpha A. Diefenderfer Award to the highest-ranking junior in analytical chemistry Vicki A. Sciorra
- Eta Kappa Nu Prize to the highest ranking freshman in electrical and computer engineering Tariq Ahmed Quraishi
- Joseph C. Gabuzda, Jr., Memorial Award - to a junior electrical or computer engineer showing outstanding promise intellectually and in leadership qualities Scott T. Ferguson Milton A. Snyder IV
- Malcolm J. Gordon, Jr., Physics Prize – to the top-ranking sophomore majoring in physics with some extracurricular activity Craig Joseph Constantine
- Robert C. Hicks Prize to a student or students who rank academically among the top four in Chemical Engineering at the end of their sophomore or junior year Michael J. Marsh
- Harold J. Horn Prize to the highestranking juniors in electrical engineering Allen Prescott Haar Scott T. Ferguson

Mathematics Faculty Award – to an outstanding junior majoring in mathematics or statistics Jennifer L. Reller

Elizabeth Major Nevius Award - to individuals who have entered their fifth year of work at Lehigh, whether it be a second undergraduate degree or graduate degree, on the basis of leadership, citizenship and scholarship David A. Bader Jan Philip Falkin Jake Fotopoulos Jennifer Lynn Jacobson Robertos Anthony Karahannas Kerry Anne Koenemund Bijan Marjan Geraldine Kay Micek Edward Samuel Regan James M. Schray Maurice L. Sipos Amy Michele Wilkowe

Pi Tau Sigma Prize - the highestranking sophomore in mechanical engineering, Jeffrey Alan Hittinger

Leonard P. Pool Memorial Prize - to rising juniors and seniors, interested in a career in the business community, who have exhibited those entrepreneurial talents which so typified the life and career of Mr. Pool Jeffrey Howard Epstein Lane P. Pendleton John Farrell Sponza

John S. Steckbeck Memorial Award to the senior army ROTC cadet who best exemplifies the school spirit of John Steckbeck Maurice L. Sipos

Tau Beta Pi Prize - to the engineering sophomore having the highest scholastic average Philip Joseph Brennan

Trustees Scholarship Cup - to the living group having the highest scholastic average for the preceding year Drinker A-4 (3.216)

John R. Wagner Award – to the junior student in mechanical engineering whose scholastic record is the highest in his or her class in the freshman and sophomore years and whose character and life purposes are deemed deserving and worthy Peter Truxtun Jones

William Whigham, Jr., Memorial Prize to the highest-ranking freshman in engineering based on high cumulative average in the first two semesters Philip Joseph Brennan

Elisha P. Wilbur Scholarship Prize to the sophomore with the best semester average for the sophomore vear

William Joseph Tronoski

Williams Prize in Composition Meghan Rowe - Senior Margaret Welsh - Junior Sharon Nevah - Sophomore

Theodore B. Wood Prize - to the mechanical engineering student who has made the greatest scholastic improvement during the first two years of the college course William C. DeHaven