

# UNIVERSITY OF COLORADO at COLORADO SPRINGS

Commencement

May Twenty-Third Nineteen Hundred and Eighty-Nine

# THE REGENTS OF THE UNIVERSITY OF COLORADO

Chairman Mr. Norwood L. Robb Littleton

Mrs. Kathleen S. Arnold Littleton

Mr. Richard J. Bernick Denver

Mr. Robert E. Caldwell Colorado Springs

Mr. Peter C. Dietze Boulder

Mr. Lynn J. Ellins Longmont

Dr. Harvey W. Phelps Pueblo

Dr. Roy H. Shore Greeley

Gen. David W. Winn Colorado Springs

# **PROJECTIONS**

To the Class of 1989:

On behalf of the University of Colorado, I am pleased to extend congratulations upon your achievement. Your graduation is a special milestone in your life, and in the life of the University.

It is customary on these occasions to speak of the opportunities in your future. At this commencement, however, I prefer to dwell, however briefly, upon the University's educational task and the problems you will face in the coming decades.

The University is committed to missions in education, research, and public service. Of these, education is generally most visible through classroom teaching. Much more is involved in the pedagogical process, however. During the past several years, the University has endeavored to equip you with the knowledge and skills required to lead intelligent, productive lives in the coming decades. That is a basic component in our mission, but it is only the beginning. It is more important that you also have a sense of those societal and ethical values which have guided humankind in its noblest hours. Courage in the face of adversity, perserverance in times of difficulty, creativity under limits of constraint, these are some of the traits you must learn in confronting the problems and challenges of the future. They are functions of personality and experience, and cannot be taught in a classroom. You can, on the other hand, bring to these challenges the knowledge of human experience, and inherent in that experience is the accumulated wisdom of civilization. This is, and should be, your most influential source of learning. Once filtered through your own experience, consideration, and values, this knowledge may guide you in directing the future.

It is your obligation, of course, to consider all appropriate factors in any decision. I urge you to temper knowledge with compassion, to balance immediate gain with farseeing wisdom, and to promote at all times the common good, not self-interest. These are your true obligations to your society, your fellow-citizens, and the future.

The University of Colorado has, I trust, imparted to you an important quantity of knowledge and an appreciation of certain societal and ethical values. It is now your obligation to extend and develop your knowledge and values, and to direct these toward the common good, toward creating a better future. You will face unprecedented challenges requiring heroic efforts. Society's hopes rest with you.

E. Gordon Gee President

E. Miden See

#### ORDER OF EXERCISES

Gene Abrams, Commencement Marshall (1988 UCCS Outstanding Teacher)

Processional (audience will please remain seated)

Posting of the Colors

Invocation

America the Beautiful1

Welcome

Address

Distinguished Service Award Gen. Robert T. Herres

Legislative Award Lee Elwood Gillis

Regent Emeritus Award Sandy F. Kraemer

Conferring of Baccalaureate Degrees Recognition of Outstanding Graduates

College of Letters, Arts and Sciences Natural Sciences Social Sciences Humanities

College of Business and Administration

College of Engineering and Applied Science

Conferring of Advanced Degrees

Initiation of Graduates into Alumni and Friends Association

Charge to Graduates

Alma Mater<sup>2</sup>

UCCS ROTC Color Guard

Dr. Merrill J. Lessley

Dr. Paul Ballantyne

Chancellor Dwayne C. Nuzum

President E. Gordon Gee

Jane E. Brant Johnson Rita Randolph Charles S. Walters

Joni L. McLain

Chris D. Hyser

Kevin Olson

School of Education Dean Margaret Bacon

Dr. Paul Ballantyne

Recessional (audience will please remain seated)

O beautiful for spacious skies,
For amber waves of grain,
For purple mountain majesties
Above the fruited plain!
America! America!
God shed His grace on thee
And crown thy good with brotherhood
From sea to shining sea!

<sup>2</sup>Hail, all Hail our Alma Mater!
Ever will our hearts be true
You will live with us forever
Loyal we will be to you.
We will sing forever your praises,
Ever more our love renew,
Pledge our whole devotion to you,
Dear Old C.U.!

# CANDIDATES FOR DEGREES COLLEGE OF LETTERS, ARTS AND SCIENCES

James A. Null, Dean

The Degrees Bachelor of Arts and Bachelor of Science

```
Nancy E. Adams, Psychology
       Judith B. Aghababian, Chemistry (B.S.)
       Charles G. Albrecht, III, Communication
      Judy A. Alexander, Psychology*
      John P. Allard, Psychology
Carol A. Allen, Geography and Environmental Studies
Magna Cum Laude
      Dianna S. Anderson, Communication
      Kenneth C. Andrew, Communication
Dean B. Atkinson, Chemistry (B.S.)
Jennifer L. Baker, Psychology
Pamela R. Baker, Communication
      Monica L. Barb, Biology*
      Lori A. Barinque, Sociology
Wendy A. Barone, Chemistry
                                                SGT. W. BARNARD POL . SCIENCE
      Tammy A. Barthel, Communication
      Joanne M. Battiste, Fine Arts*
Louise M. Bauer, Sociology W. dist.
Mark W. Bell, Communication**
      Faith A. Benton, Mathematics
      Delores D. Berdine, Psychology
Steven Bessette, Political Science
      Kirsten A. Bilzing, Sociology**
Cum Laude, with high distinction
      Donna L. Bissell, Communication*
      Felicia L. Blake, Psychology
      Catherine L. Bockey, Psychology
        Cum Laude
     Randal W. Bowen, Fine Arts
     Nawana J. Britenriker, History**
     Nikki T. Brooker, Psychology LUM LAUDE
     Jennifer L. Brown, Psychology
     Pamela C. Brown, Psychology**

Magna Cum Laude

Roy A. Brown, Jr., Spanish
     Song Ah Brown, Biology
Magna Cum Laude
     Elizabeth K. Bunting, Psychology/Sociology**

Magna Cum Laude
     Ann A. Burton, Communication**
        with high distinction
     Sharri L. Cadman, Distributed Studies**
Harold M. Calvert, Biology
     Robert T. Cambron, Chemistry (B.S.)
Kevin L. Camerlo, Economics**
with high distinction
    Marc R. Canady, Communication
Kimberly Carlin, Sociology
Henry F. Carter, Communication**
     James R. Carver, Geography and Environmental Studies
     Charles E. Chase, Chemistry (B.S.)
     Song Un Chon, Sociology
     Julia O. Chung, Psychology
    John J. Ciofalo, Fine Arts
Timothy E. Cockroft, Chemistry (B.S.)
     Sheri L. Coe, Political Science
     Eddie R. Conley, Philosophy
     Monica A. Cooper, Communication
     Susan B. Corcoran, Biology/Communication**
     Deborah M. Coultrip, English*
     Laura A. Cowan, Sociology
     Janice L. Craver, Communication/Psychology**
    Robert A. Cross, Distributed Studies*
Barbara M. Curcio, Psychology*
     Joseph P. Cullen, Sociology
    Meredith A. R. Davis, Communication
       with distinction
     Scott L. Dayberry, Physics and Energy Science (B. S.)
    Henrietta K. DeGroot, Political Science
    Janeen A. Demi-Smith, Communication
    James R. DeVault, Political Science*
    Paulette M. DiBenedetti, Political Science
    Jodi A. Dickes, Spanish
    Daniel J. DiRito, Economics
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Mary J. Dodge, Psychology

Magna Cum Laude, with highest distinction

William G. Drexler, Communication
 Antoine G. DuCros, Sociology**
                                        TAHI L EDGERTON , ENGI / FINE ARTS
 Win S. Eckert, Anthropology
 Kathleen Ellis, Communication
   Summa Cum Laude, with highest distinction
 Suzanne D. Ellis, Sociology
 Michele L. Erbeck-Comfort, Sociology
Jill D. Eye, Communication
Cynthia K. Fallon, Fine Arts W/ dist
 Monique L. Fitch, Psychology*
 Nancy J. S. Fleming, Psychology
   Magna Cum Laude
 Corrina F. Franklin, Psychology
Magna Cum Laude, with high distinction
Cliffton J. Fredericks, Distributed Studies*
Clark M. Friedricks, Geography and Environmental Studies
Andrea C. Frost, Mathematics**
 Bobbie J. Frost, Psychology
Abel Fuentes, Psychology/Sociology
Paul H. Gallogly, Economics*
Brian S. Galpin, Psychology**
 Francina M. Galvin, History**
  Summa Cum Laude
 Paula L. Gamache, Communication
Barbara L. Gamble, Sociology
Magna Cum Laude
Michele G. Gandy, Psychology
with highest distinction
Kevin C. Gannon, Economics**
Doris L. Garcia, Political Science
Maria L. Garcia, Psychology
Grace M. Garouno, Psychology
Wesley P. Geiger, Psychology**
Tina M. Gettman, Biology
Abdul-Aziz S. Ghuloum, Communication**
Robert G. Gibbons, Distributed Studies*
  Summa Cum Laude
Sharon A. Gibson, Fine Arts**
Marcia L. Gieck, Sociology Winigh dist.

Dyanne K. Gillis, Communication**
William J. Gillum, II, Psychology/History
Desiree R. Gonzales, Sociology
Kimberleigh L. Green, Communication
Allan G. Grines, Sociology
Terry A. Guild, Distributed Studies
Barbara J. Guinther, English*
   with highest distinction
Jo N. B. Hafer, English
Kimberly L. Hale, Psychology
Terryll B. Harfert, Distributed Studies
Susanna N. Hasebe, Biology
Sandra M. Haugen, Psychology/Sociology
Randall A. Hayes, Psychology
Michael S. Held, Communication*
Luann M. Helwig, Communication**
Dolores A. T. Herbst, Distributed Studies
Elizabeth A. Hickman, Biology
Maureen F. Higgins, English
Kent R. Hildebrand, Communication
Lee A. Hillhouse, Political Science
Magna Cum Laude Winigh dist.
Mark L. Hockman, Mathematics*
Mark A. Hodges, Geography and Environmental Studies
Mark A. Hodges, Geography
Constance I. Hofmeister, Psychology
Magna Cum Laude
                                               dist
Erika C. Hosier, Psychology
Pamela A. Hosman, Psychology
Michael K. Houser, Psychology
Tad C. Howard, Political Science
Annette M. Hritz, Psychology
  Magna Cum Laude
Tracie T. Hunt, Psychology*
Shelly L. Jacobson, Sociology
Cheryl L. Jenkins, English
DeEnna R. Jensen, Sociology/Political Science
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Carol P. Johnson, Political Science\*\* Ralph A. Richardson, Physics and Energy Science (B.S.)\* Donald C. Rickard, II, Communication Diane E. Johnson, Sociology Jane E. B. Johnson, Chemistry (B. S.) Summa Cum Laude, with highest distinction Christine G. Riley, History Leonard Riley, II, Psychology Stacy J. Johnston, Psychology Valerie M. Joiner, Sociology M. Dawn Robertson, Chemistry (B. S.) Sharon C. Robbie, Communication\* David R. Jones, Political Science\*\* Rebecca L. Rohr, English\* William T. Jordan, Psychology/Political Science Jane B. Romano, Psychology w/ nighdist Jennifer K. Rudio, Fine Arts Kiran Kanchanlal, Communication\* Paula J. Russel, Communication Patrick J. Kearney, Political Science/Economics Scott T. Ryden, Distributed Studies
Cum Laude Marla S. Keathey, Foundar Science/Economics
Marla S. Kent, Geography and Environmental Studies
Candace R. Kenyon, Biology
Meredith C. Kilby, Fine Arts
Elnor L. Kinsella, Fine Arts Azita Safai, Chemistry (B. S.) Sandra L. Saliba, Psychology Jillian E. Sampson, Communication Lisa G. Kirchner-Martin, Communication
Christine R. Knight, Geography and Environmental Studies
Elizabeth L. Kohlmeyer, History
Patrick F. Kolarik, Physics and Energy Science (B. S.) Susan M. Schlueter, Communication Magna Cum Laude, with distinction David S. Schmidt, Sociology\* Jennene J. Scott, Political Science Kathryn E. Seeley, Political Science Elizabeth R. Seitz, Sociology\* Thomas P. Kozak, Physics and Energy Science (B. S.) Gary J. Krasovetz, Fine Arts\*\* Mark A. Kromer, Political Science\*\* Rebecca S. Shields, Sociology Bruce J. Kuhns, Spanish\*
Summa Cum Laude, with highest distinction
Ernest N. Lagasca, Jr., Biology
Annette D. Lasley, History Edith L. F. Shotwell, English Magna Cum Laude Magna Lum Laude
Margaret C. Shoup, Chemistry (B. S.)
Magna Cum Laude, with highest distinction
Tammy R. Shuminsky-Ferguson, Psychology
Grace M. Silva, Psychology
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Magna Cum Laude
William J. Simmons, Psychology
William J. Simmons, Psychology Thomas C. Latta, Communication\*\* Michael A. Lesser, Political Science\*\* Delores J. Liggett, Psychology
Summa Cum Laude Steven M. Sims, Distributed Studies\*\* Alisa L. Loeper, Sociology Nadia P. Slusar, Physics and Energy Science (B.S.)\* Denise L. Lucero, Psychology
Magna Cum Laude

Carol Mae Magruder, Psychology Bonita H. Smith, Geography and Environmental Studies Michael E. Smith, Physics and Energy Science (B.S.)\* Richard A. Smith, Psychology Deborah C. Manyik, English Caroline B. Mann, Psychology\*\*
Rebecca A. Marincel, Communication
Jeffery B. Marshall, Biology Stephanie A. Smith, English Hans F. Sorensen, Anthropology Diana M. Spahr, English Bonnie J. Stewart, Chemistry (B. S.) LUM LAUDE, W/ nigh dist. Yolanda L. Martinez, Communication\*\* Anthony Marzavas, Political Science\*\*
Juanda Y. Mayberry, Political Science
Laura S. McAnulty, Psychology
Magna Cum Laude Mara Sube, Communication Marlin W. Sutton, Biology Kelley J. Talbot, Distributed Studies\*\* Magna Cum Laude Michelle D. McClure, Communication\*\* Donna J. Tannehill, Mathematics Kenneth S. McCoy, Philosophy\*\*
Elizabeth J. McGraw, Communication Lora B. Tannehill, History Andrea L. Taylor, Mathematics \*\* Lisa McGrew, Psychology\*\*
Christopher G. McLaughlin, Biology
Kathleen M. McMahan, Communication Tamara M. Teale, English\*\* TETTI ANN MILLET PHYSICS & Pamela S. Terry, Distributed Studies\*\* Debra K. Mikash, History Melissa D. Mitchell, Psychology Susan V. Moore, Communication\* Dedra T. Montoya, English ENERGY SCIENCE Evelyn L. Thrugstad, History

Elizabeth W. Traver-Husband, Sociology will night the dist.

Philip G. Trejo, Sociology\*\* Robert B. Trimble, Political Science\*\* Cynthia M. Morgan, Psychology\*\* Carol J. Troutman, Psychology Deborah M. Morgan, Political Science Marilyn H. Ulanowski, Geography and Environmental Studies Jennifer J. Morin, Biology Beth A. Ullom, English Lisa Q. Ulfers, Sociology\* Harry J. Myers, Communication Christine M. Nevel, Political Science Susan L. O'Banion, Fine Arts Shirley E. Va'i, Psychology Cum Laude Staci A. Oldehoeft, Communication Ann C. M. Van Wey, English\* David A. Osborne, Economics' Monika M. VanCleve, Psychology Rebecca R. Ott, Communication Cum Laude Linda J. Painter, Sociology\*

Magna Cum Laude Carlotta D. Vetter, Sociology Annette J. H. Visty, Communication with high distinction Jacqueline D. Parrish, Psychology\*\* Elizabeth M. Payne, Psychology\*\* Leonard E. Petrocelli, Distributed Studies\*\* Shelly A. VorderLandwehr, Psychology
Kathleen D. Waidlich, Psychology
Magna Cum Laude

Magna Cum Laude

A CR CA Catherine A. Pellow, Psychology
Charles E. Petrocelli, Distributed Studies
Catherine A. Pellow, Psychology
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Charles E. Petrocelli, Distributed Studies
Catherine A. Pellow, Psychology
Charles E. Petrocelli, Distributed Studies
Catherine C. Petrocel John J. Walker, Chemistry (B. S.) Charles S. Walters, Philosophy Patricia A. Piche, Biology\*\*

Magna Cum Laude

Julie M. Plylar, Sociology\* Carol R. Weissler, Geography and Environmental Studies\*\* Cum Laude Donna M. Poponick, History
Magna Cum Laude Beate D. White, Sociology Magna Cum Laude wil high dist Donna J. Poulton, Sociology Kelly D. Wickline, Sociology\*\* Sharon M. Psensky, Geography and Environmental Studies Wendy K. Wiegert, Communication\* Melinda C. Quintana, Sociology Gina M. Wilcox, History/Geography and Environmental Studies Patricia A. Ramos, English\*\* Brenda M. Williams, Psychology\* Rita G. Randolph, Communication\*

Summa Cum Laude

Diane M. Reed, Geography and Environmental Studies

Magna Cum Laude Patrick S. Williams, Communication Mary J. Wooley, Psychology Joseph L. Wyatt, Political Science\*\*
Christopher C. Zeitner L. Tribuner C. Zeitner L. Wyatt, Political Science Suzanne S. Reed, Psychology

Stephanie E. Reininger, Spanish

# COLLEGE OF BUSINESS AND ADMINISTRATION

Resident Dean James T. Rothe

THE DEGREE BACHELOR OF SCIENCE (BUSINESS)

Karen J. Alston\*\* Terri B. Amon Magna Cum Laude Constance L. Anderson Suzanne V. Anderson Cheryl E. Arata James M. Ash\*\* Holly D. Atkins\*\* Deborah L. Babcock\*\* Katherine A. Babcock Magna Cum Laude Russell W. Bailey\*\* Leslie M. Baker Cum Laude Richard L. Ball\*\* Jeffrey P. Baron\*\* Magna Cum Laude Catherine M. Bartlett\*\* Mark W. Berriman Pamela Berry\*\* Alice G. Bingel\*\* William J. Bottini\*\* Deborah A. Bonn Magna Cum Laude Michael E. Brown Hugh A. Burns, Jr. Magna Cum Laude Clark H. Burr Erin M. Butler Stephen L. Cassity\*\* Layne M. Chamberlain James M. Cimino Kristin J. Cole Peter W. Crowell Magna Cum Laude

Douglas O. Curry Ibrahim O. Dannoun Ronald W. DeMent\* David T. Dixon\*\* Neil W. Dozier\*\* Stephen D. Dunnahoo Magna Cum Laude Marie J. Ellingsworth\*\* Mark W. Emeis Karen S. Erbes Magna Cum Laude Sondra A. Evans Richard C. Fidler Craig M. Fleischmann\*\* Kent D. Fortune Melanie J. Fuchs Magna Cum Laude Clark H. Gabriel Pamela W. Gamer\*\* Summa Cum Laude Heidi C. Gerhards Carol A. Godwin Julia M. Guice Cinda E. Haggren\*\* Carol E. Hammer\* Iona M. D. Hanenberg\*\* Summa Cum Laude Paula S. Hanson\*\* Laurie A. Heisner\*\* Selina K. Hensley Cum Laude Kevin D. Hobbs Magna Cum Laude Beverly A. Hodges\*\* Magna Cum Laude

Cindy L. Holley\*\* Todd W. Holmquist\*\* Raymond L. Javernick Luuis M. Jimenez Kathleen R. Kassing Debra K. Kiehn Un S. Kim\* Donna M. Kress Susan M. F. Lachman Summa Cum Laude Gary W. Leak Carolyn E. W. Lemp Cum Laude Kevin F. Liston Jeffry S. Loeper Woodrow Longmire Jennifer L. Loxley-Lexa Mary E. Lovell Om K. Manrao Karen L. Mason\*\* Deborah J. Matheny\* Deborah E. Matthews\*\* Tamara D. Matthews Amy S. McClelland\* Cum Laude Michael G. McCoy\*\* Marie E. McIntire
Faye S. McKenny LAUDE Joni M. McLain Summa Cum Laude Matthew R. Miller\*\* Patrick J. Miller Stephen E. Mills

Janice R. Mount Laura J. Myers Barbara A. Negilski John A. Normile Guy N. Ockerlund\*\* June C. O'Rourke Neal O'Sullivan Cum Laude Karen I. Pajor Chris M. Pappas\*\* Sharon M. Paulson\*\* Cum Laude Robert L. Peterson, Jr. \*\* Teresa R. Phillips\* Deborah D. Pierce H. K. Prettyman Pamela A. Pryce Magna Cum Laude Clarisse H. Ramirez Magna Cum Laude Kathryn A. Raymond Magna Cum Laude Steven A. Reid Cum Laude Lisa M. Ripple Kelly J. Robbiano Gregory L. Rodriguez Bryan E. Scanlon Charles A. Scheiwe Wendy S. Schicktanz Cum Laude John R. Schneebeck Carol A. Schodorf\* Kathleen M. Seitz

Tabitha A. Slaven Susan L. Smith\* Michelle M. G. Somers Magna Cum Laude Michael L. Sondgerath Kevin T. Stansberry\*\* James G. Starkweather Catherine L. Stedman\*\* Jack Sulsona\*\* Barton G. Swanson Karla R. Swanson Jillavne R. Tancock\* Donald B. Taylor\* Carol Sue Thomas\* Lisa A. Thomas Kelley K. Thompson Elena S. Tomorwitz Summa Cum Laude Molly C. Tredwell Alissa S. Turner Jeffrey W. Utrias Gail A. Vallance Maria D. S. Vera Michelle R. Walker -JAMES A Duane M. Waterman\*\* William J. Weide Russell W. Wekamp Stephen A. White Heather A. Wilkerson Stephanie E. Wilmer Michele E. Withrow\*\* Jason P. Young

# COLLEGE OF ENGINEERING AND APPLIED SCIENCE

Nancy Missack\*\*

Dean Pieter A. Frick

THE DEGREE BACHELOR OF SCIENCE

Richard C. Anderson, Computer Science Charles F. Avila, Electrical Engineering\* James Barrilleaux, Electrical Engineering Theresa M. Bertolini, Electrical Engineering\*\* Alireza Boroumand, Electrical Engineering David C. Brabb, Electrical Engineering\* Kevin W. Brugh, Computer Science James R. Campe, Electrical Engineering Scott S. Carter, Computer Science\* Bruce D. Crump, Electrical Engineering Christopher J. Curl, Electrical Engineering Renée Depew, Electrical Engineering Sarah L. Disch, Electrical Engineering Jalal Droodiani, Electrical Engineering\* Laura L. Dulcie, Electrical Engineering\*\* Roger D. Fulton, Computer Science\* Karen T. Elsey, Electrical Engineering\*\* Richard L. Enger, Electrical Engineering\*\* Sandra L. Evans, Computer Science Donald J. Eydenberg, Electrical Engineering Lorne C. Fetterman, Electrical Engineering Ronald C. Flores, Electrical Engineering\* Michele A. Glaze, Electrical Engineering Frederick G. Glock, Electrical Engineering\*\* Trenton H. Hall, Computer Science Jeb S. Harman, Computer Science\*\* Keith D. Hemenway, Electrical Engineering\*\* Thomas H. Huntington, Applied Mathematics\*\* Chris D. Hyser, Electrical Engineering with special honors
Kurt J. Ianacone, Electrical Engineering\*\* Michael L. Kinney, Electrical Engineering Lisa M. Klag, Computer Science\*\*
Carolyn J. D. Kurtz, Computer Science Elizabeth R. Lang, Electrical Engineering\*\* Arlan G. La Voie, Electrical Engineering Elizabeth A. Lee, Applied Mathematics\*\* Michael A. Mares, Electrical Engineering William S. McBride, Electrical Engineering\*\* Larry D. McMillin, Computer Science Michelle P. Meadows, Electrical Engineering Kurt W. Metzger, Electrical Engineering Shon B. Mitchell, Computer Science\* Mary J. Morin, Electrical Engineering Douglas E. Neufeld, Computer Science Hang T. Nguyen, Electrical Engineering Sharon L. Norred, Computer Science Simon W. Nunn, Computer Science Amy E. O'Keefe, Computer Science Thomas W. O'Steen, Computer Science Michael J. Pararas, Electrical Engineering\*\* Gertraud Pascucci, Computer Science Madhuker M. Patel, Electrical Engineering\*\* with honors
Ferdinand D. Periquet, Computer Science\*\*

Brent A. Petersen, Electrical Engineering Hung Q. Pham, Electrical Engineering Dale L. Pittock, Electrical Engineering\*\* Lisa M. Ponzini, Electrical Engineering\*\* Steven A. Roodbeen, Applied Mathematics\*\* Daniel B. Ruth, Electrical Engineering Andishe Samandari, Electrical Engineering Patricia A. Sanachez, Electrical Engineering\*\* Douglas A. Scott, Electrical Engineering Leroy M. Silva, Computer Science\* Greg F. Shumaker, Electrical Engineering\* Darryl L. Snively, Electrical Engineering Richard P. Soares, Jr., Electrical Engineering\*\* Charlie M. Stallard, Jr., Electrical Engineering Robin C. Sulski, Electrical Engineering Gregory A. Tarcza, Electrical Engineering Joyce E. Terry, Electrical Engineering\* Pamela H. Thomas, Electrical Engineering\* Philip D. Tonge, Electrical Engineering Jeffery E. Turner, Electrical Engineering\*\* David C. Uraneck, Computer Science with honors Steven W. Wernli, Electrical Engineering\*\* with special honors Brent R. Whitsitt, Electrical Engineering\*\* Roger W. Wild, Computer Science Scot R. Wurster, Electrical Engineering Christopher M. Wyckoff, Computer Science

#### THE DEGREE MASTER OF BASIC SCIENCE

David A. Brown Kirt E. Casler Patricia K. Coomber Mark D. Rice\* Michael A. Simpson\*

#### THE DEGREE MASTER OF SCIENCE

Ray Beamer, Electrical Engineering\*\* Barret J. Belian, Computer Science William D. Beteille, Computer Science Jeffrey Brooke, Electrical Engineering\*\* Kim Buckler, Electrical Engineering\* Yohtz Chang, Electrical Engineering Hsiu Coe, Electrical Engineering\*\* Ann L. Cushman, Applied Mathematics Frank B. Dubach, Computer Science Roberta M. Ewart, Electrical Engineering Barry S. Gamblin, Computer Science Mark A. Geiger, Applied Mathematics Kenneth Gibson, Computer Science\*\* Joann Gravitt, Electrical Engineering\*\* Joel L. Gross, Electrical Engineering Steven P. Hardyman, Applied Mathematics\*\* Debra laeger, Computer Science\*\* Ryan N. Jensen, Electrical Engineering Thomas Johani, Electrical Engineering Michael P. Johnson, Electrical Engineering Dwight R. Kinney, Electrical Engineering\*

Raymond W. Kolbe, Computer Science James R. Logan, Computer Science David Lohman, Computer Science\*\* Andrew T. McMahon, Electrical Engineering Karen M. Michels, Computer Science John E. Oldberg, Computer Science James W. Pero, Electrical Engineering Leslie Roberts, Computer Science\*\* Robert M. Rutherford, Computer Science Randall L. Sandusky, Electrical Engineering APPLIED MATH Thomas E. Schmid, Electrical Engineering Cynthia L. Starr, Electrical Engineering William Staton, Electrical Engineering\*\* Mark Taylor, Computer Science\* Timothy L. Trowbridge, Electrical Engineering Linda S. Tully. Computer Science Michael G. VanGrouw, Electrical Engineering Roger J. Veracruyse, Electrical Engineering William E. Walsh, Computer Science Mark C. Wallace, Electrical Engineering Carolyn M. Yeager, Computer Science

#### THE DEGREE OF MASTER OF ARTS IN PSYCHOLOGY WITH C.U. AT BOULDER

Teresa S. Anderson, Psychology Susan E. Becker, Psychology\* David C. DiRito, Psychology Kathleen A. Hake, Psychology\* Fred H. Herring, Jr., Psychology\* Jennifer C. Nagode, Psychology Heather Sena, Psychology\* Laurie M. Taylor, Psychology\* Eugene E. Van Dusseldorf, Psychology James F. Yates, Psychology\*\*

#### THE DEGREE OF MASTER OF ENGINEERING IN SPACE OPERATIONS WITH C.U. AT BOULDER

Raymond A. Beamer, Jr.\*\*
Mary Beth Bridgham
Mary Jo H. Darress
Lucien T. Hall\*
Brenda J. Kallighan
Timothy J. Lea\*\*

Kenneth A. Lillie\* Scott F. Merrow\*\* John A. Paulsen Merri Anne Stowe\*\* Richard E. Tremblay Charles E. Wiyell\*\*

#### CANDIDATES FOR COMMISSION

Second Lieutenant, United States Army

Steven Bessette
E. Camachocervantes
William D. Carr
James M. Cimino
Dana A. English
Doris L. Garcia
Allan G. Grines
Terry A. Guild
Michael W. Hester
Jeff R. Mora
Scott M. Muir

Michael R. Nyberg Michael J. O'Neill Thomas W. Osteen Dean T. Ross Ronald T. Shaffer Heike M. Scholz Cindi L. Smith Stephanie A. Smith Martin W. Vandoorninck Christopher C. Zeitvogel

## RESOLUTION OF APPRECIATION

SANDY F. KRAEMER

WHEREAS Sandy F. Kraemer was elected to the Board of Regents for a six-year term from Congressional District 5 in 1976, and re-elected for a second six-year term in 1982;

WHEREAS he served in conjunction with the administrations of Presidents Rautenstraus, Weber, Baughn, and Gee; and was Chairman of the Board during 1982-83;

WHEREAS he authored resolutions establishing: monthly general fund and budget plan alerts; a minority committee to advise each campus administration on minority student recruitment and retention; and annual substance abuse awareness week at each campus; a cooperative statewide effort to publish an economic development report to be used in attracting industry to the state (Research Mountains Colorado); standards of conduct for persons attending events at Folsom Stadium and the Events/Conference Center; increased institutional contributions for need-based financial aid; and uniform student academic honor codes and conduct codes;

WHEREAS he was instrumental in seeking the approval and construction of the Engineering Building in Colorado Springs; was concerned with the preservation and expansion of recreational space on the campuses; was a vocal advocate for energy conservation by the University; had reservations about the sale of 3.2% beer in Folson Stadium; was a strong supporter of affirmative action; and coauthored the Kraemer-Noel report on minority enrollment and retention;

WHEREAS he brought to the Board important personal philosophies, was a forceful advocate of financial accountability, and consistently challenged the administration to pursue the quest of becoming a world-class university;

WHEREAS the Board and the University community will greatly miss the active and in-depth involvement of Sandy and Dorothy Kraemer in the events of the institution;

NOW THEREFORE BE IT RESOLVED that the Board of Regents expresses its deep appreciation to Sandy F. Kraemer for his dedication, his conscientious and long service, and his many accomplishments on behalf of the University and the State of Colorado; and he be granted the title of Regent Emeritus of the University of Colorado.

# THE PRESIDENTIAL CHAIN OF OFFICE

The Presidential Chain of Office was created in 1980 by Mary Sartor, M.F.A., University of Colorado, Boulder, for the inauguration of President Arnold R. Weber. The Chain was a gift to the University by Mr. and Mrs. David G. Hawthorn, Class of '24.

Colorado gold and silver are used throughout the chain to symbolize the importance of those minerals to the history of the State. The gem stones chosen also consist entirely of minerals from Colorado.

Three pendants are suspended on the chain. The back pendant is the Seal of the State of Colorado surrounded by a golden ribbon representing the golden Circle of Knowledge. The top pendant in the front, the Seal of the University of Colorado surmounted by an arch set with diamond and topaz, signifies the necessary link between the search for knowledge and its practical application to the world outside the University. The Seal is supported at the bottom by the laurel wreaths found in the Seal, emblematic of honor and success.

The bottom pendant is centered with a golden topaz indicating man's quest for knowlege. The surrounding ring is paved with fragmented cubes and diamonds which suggest fragments of knowledge with brilliant breakthroughs of understanding.

The chain surrounding these pendants symbolizes the endless but ever-changing cycle of human knowledge.

### THE UNIVERSITY SEAL

The University of Colorado has used three different seals in its lifetime.

The present seal, adopted in 1908, depicts a classical Greek male figure seated against a pillar and holding a scroll. A burning torch framed in laurel is placed beside him. The Greek inscription means "Let your light shine."

According to Denver designer Henry Read, the classical design was used because Greek civilization "stands as the criterion of culture." The laurel symbolizes honor or success, the youth of the figure suggests the "morning of life," and the scroll represents written language.

From 1893 to 1908, a seal was used which copies Wyon's medallion, "Science Trims the Lamp of Life." The classical figure of a kneeling Greek woman was flanked by mariposa lilies, which President Baker described as "a true Colorado flower."

Before 1893, a seal was used which essentially copies the Colorado state seal. It was never adopted by the Regents.

The official seal of the University of Colorado is used only by the Regents in transmitting official business.

# THE NORLIN CHARGE TO GRADUATES

(From the baccalaureate address by President George Norlin, of the University of Colorado, June 1935.)

"You are now certified to the world at large as alumni of the University. She is your kindly mother and you her cherished sons and daughters.

"This exercise denotes, not your severance from her, but your union with her. Commencement does not mean, as many wrongly think, the breaking of ties and the beginning of a life apart. Rather it marks your initiation in the fullest sense into fellowship of the University, as bearers of her torch, as centers of her influence, as promoters of her spirit.

"The University is not the campus, not the buildings on the campus, nor the faculties, not the students of any one time—not one of these or all of them. The University consists of all who come into and go forth from her

halls, who are touched by her influence and who carry on her spirit. Wherever you go, the University goes with you. Wherever you are at work there is the University at work.

"What the University purposes to be, what it must always strive to be, is represented on its seal, which is stamped on your diplomas—a lamp in the hands of youth. If its light shine not in you and from you, how great is the darkness! But if it shine in you, today and in the thousands before you, who can measure its power?

"With hope and faith, I welcome you into the fellowship. I bid you farewell only in the sense that I pray you may fare well. You go forth, but not from us. We remain, but not servered from you. God go with you and be with you and us."

#### ACADEMIC DRESS

The tradition of the academic costume apparently began during the twelfth or thirteenth century in the early European universities. Since the clergy composed the majority of the educated class, academic dress is an adaptation of the cope or mantle which was usually of silk or wool, and worn by church dignitaries in religious processions.

Through the years, great diversity in color and in style of cap, gown and hood developed. In 1896, the colleges and universities in the United States adopted a uniform code governing academic dress. Today, the black gown, hood, and mortar board worn by the graduates in most institutions follow this code.

While it is not apparent to the casual observer, the gowns worn by the recipients of the various degrees vary somewhat in design. The sleeves of the gown worn by the baccalaureate candidate are long and pointed, while the sleeves of the gown worn by the master's degree recipient are square at one end with a slit at the elbow. The doctor's gown has flowing sleeves with three bars of velvet, and a facing of velvet down the front of the gown.

Those who receive a master's or a doctor's degree from the University of Colorado wear hoods lined with the school colors, silver and gold. The hood worn by the doctor's candidate differs in design from that of the master's as it has side panels and is slightly longer. The velvet border of the hood indicated the degree and usually follows the same code as the color of the tassels.

The oxford cap, usually referred to as a mortar board, is black and has a long tassel which is fastened by a button on the top. Candidates for the baccalaureate degree wear the tassel pendant over the right front of the cap before the degree is conferred, then it is worn on the left side. Summa Cum Laude and special honors candidates will wear gold honor cords.

# **ACKNOWLEDGEMENT**