

## CURRICULUM VITAE

### **SANDRA JOANNE FRIEZNER DEGEN**

University of Cincinnati and  
Cincinnati Children's Research Foundation  
250 Health Professions Building  
PO Box 670663  
Cincinnati, Ohio 45267-0663

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FAX: (513) 558-0549  
Email: sandra.degen@uc.edu

### **PERSONAL INFORMATION**

Born: January 15, 1955; Glendale, California  
Married to Jay L. Degen  
Children: Lindsay F. Degen, born 6/1/88

### **EDUCATION**

1972            Reseda High School  
                  Reseda, California

1972-1976     University of California at San Diego  
                  Revelle College in La Jolla, California  
                  B.A. in Chemistry with high honors  
                  Mentor - Dr. Russell F. Doolittle

1976-1982     University of Washington  
                  Department of Biochemistry  
                  Seattle, Washington  
                  Ph.D., Thesis Advisor- Dr. Earl W. Davie

### **EMPLOYMENT HISTORY**

1975-1976     Laboratory Assistant  
                  University of California, San Diego  
                  for Dr. Russell F. Doolittle

1976-1982     Research Assistant  
                  University of Washington, Seattle  
                  for Dr. Earl W. Davie

1983            Senior Fellow

University of Washington, Seattle  
for Dr. Earl W. Davie

1983-1985 Senior Fellow  
Friedrich Miescher-Institut, Basel, Switzerland  
for Dr. Edward Reich

1985-1992 Assistant Professor of Pediatrics  
Children's Hospital Research Foundation  
University of Cincinnati, Cincinnati, Ohio

1992-1997 Associate Professor of Pediatrics with tenure  
Children's Hospital Research Foundation  
University of Cincinnati, Cincinnati, Ohio

1997-present Professor of Pediatrics with tenure  
Children's Hospital Research Foundation  
University of Cincinnati, Cincinnati, Ohio

#### **ADMINISTRATIVE POSITIONS**

1993-1995 Director of Graduate Studies  
Graduate Program in Developmental Biology  
University of Cincinnati

1995-1998 Director  
Graduate Program in Developmental Biology  
University of Cincinnati

1998-present Associate Chair for Academic Affairs  
Department of Pediatrics  
University of Cincinnati

2000-present Associate Senior Vice President for Health Affairs  
University of Cincinnati

2004-2005 Acting Vice President for Research  
University of Cincinnati

2005-present Vice President for Research  
University of Cincinnati

#### **GRADUATE EDUCATION**

1985-present Faculty Member  
Molecular and Developmental Biology Graduate Program

University of Cincinnati

1992-present All-University Graduate Faculty  
University of Cincinnati

1992-present Training Faculty  
Physician Scholars Training Program (M.D.-Ph.D.)  
University of Cincinnati

1994-present Faculty Member  
Cell Biology Graduate Program  
University of Cincinnati

**PRESENT ADMINISTRATIVE RESPONSIBILITIES**

Associate Chair for Academic Affairs, Department of Pediatrics

High School Internship Program

Summer Undergraduate Research Program

Undergraduate Senior Thesis Program

Office of Postdoctoral Affairs

Reappointment, Promotion and Tenure Committee

Academic Family Life Committee

New Faculty Orientation

Research Foundation Website

Vice President for Research, University of Cincinnati

University Research Council

Office of Research Compliance

IRB, IACUC, Biosafety, Radiation Safety, Research Compliance Training, and Human  
Research Monitor

Office of Technology Transfer

Office of Entrepreneurial Affairs

Office of Laboratory Animal Medicine Services

Office of Sponsored Research Services

Intellectual Property Committee

UC Research Officers

Fellows of the Graduate School

**LEADERSHIP COURSES**

1993 Management Development Series offered by Division of Human Resources at  
Children's Hospital Medical Center

1993 Cultural Diversity offered by Pope and Associates

1994 Professional Development Seminar for Senior Women in Medicine offered by the  
Association of American Medical Colleges, Washington, D.C.

1994 Empowering Yourself and Others, Spring Institute of the Association for Women

- Administrators, University of Cincinnati
- 1995 The Seven Habits of Highly Effective People, Covey Leadership Center, University of Cincinnati
- 1995 Lesson in Leadership Conference, "First Things First" by Stephen Covey, Cincinnati
- 1997-1998 Executive Leadership in Academic Medicine-Program for Women
- 1998 Mediation Training, University of Cincinnati College of Medicine, run by The Center for Resolution of Disputes
- 1998 National Workshop on Mentoring sponsored by the U.S. Public Health Service Office on Women's Health, Washington, D.C.
- 1998 "Principle Centered Leadership" course Franklin Covey Co., offered by the University of Cincinnati School of Medicine
- 1998 Research America! Advocacy Training, University of Cincinnati
- 2001-2002 1<sup>st</sup> Science and Society Institute, Pew Memorial Trust

#### AWARDS AND HONORS

- 1977-1978 NIH Predoctoral Fellowship
- 1978 Elected membership in the American Chemical Society
- 1987-1991 Pew Scholar in the Biomedical Sciences
- 1989 Elected membership in The American Society of Hematology
- 1989 Elected membership in American Society for Biochemistry and Molecular Biology
- 1990 Special Reviewer for NIH Hematology I Study Section
- 1990-1995 Established Investigator of the American Heart Association
- 1992-1995 Chair, American Heart Association-Ohio Affiliate Research Peer Review Committee
- 1992 Ad Hoc Reviewer for NIH Hematology II Study Section
- 1993-1996 NIH Hematology II Study Section, Regular Member
- 1995 Ad Hoc Reviewer for NIH Liver Procurement RFP
- 1995-1998 Affiliate Study Group, American Heart Association-National
- 1996 American Cancer Society-National, Cell Biology Study Section, Ad Hoc Member
- 1997 Ad Hoc Reviewer for NIH Hematology II Study Section
- 1997-2000 American Cancer Society-National, Cell Cycle and Growth Control Study Section, Regular Member
- 1997-1998 Executive Leadership in Academic Medicine Program for Women
- 1997 University of Cincinnati Faculty Achievement Award
- 1998 Chair, National Institute of Diabetes and Digestive and Kidney Diseases Special Review Group (Contracts) for RFP on "Liver Tissue Procurement and Distribution System (LTPADS),"
- 1998 NIH Hematology I Study Section, Ad Hoc Member
- 1999 NIH NHLBI Special Review Committee for a PPG
- 1999 NIH Hematology II Study Section, Ad Hoc Member
- 2000 NIH NHLBI Special Review Committee - RFA on "Development of Mouse Phenotypic Screens"

- 2001 NIH NHLBI Special Review Committee for a PPG
- 2001-present Editorial Board, Journal of Biological Chemistry
- 2001-present Gene Editor, HUGO Mutation Database
- 2001 Leading Women of Cincinnati Award for Technology/Science/Research
- 2001 NIAID Special Emphasis Panel (SEP) "Role of Complement in Diseases and Development"
- 2001-2002 Selected to participate in 1st Science and Society Institute sponsored by the Pew Memorial Trust
- 2002-present NIH Metabolic Pathology study section, Ad Hoc Member
- 2002-2005 Research Committee, American Heart Association, National
- 2002 NIH Special Emphasis Panel, ZRG-1 SSS-1
- 2002-2004 Women's Leadership Committee, American Heart Association, National
- 2003 NIH Hematology II Study Section, Ad Hoc Member
- 2003 NIH Special Emphasis Panel, ZRG CAMP
- 2003-present Elected Fellow of the Graduate School, University of Cincinnati
- 2004 Nominee for Outstanding Woman at Cincinnati Children's Hospital
- 2005 Board of Trustees and Executive Committee, BIO/START
- 2004-2005 Howard Hughes Medical Institute/Burroughs Wellcome Foundation Partners in Scientific Management Program 2004-2005.
- 2005-present Board of Directors, TechSolve
- 2005 Founders Award, Womens Faculty Association, Cincinnati Childrens Hospital
- 2005 Recognition Award in Thrombosis, American Heart Association, National Center, Council on Arteriosclerosis, Thrombosis and Vascular Biology

### **BOARDS**

- 2004-present Bio/Start Board of Trustees
- 2004-present TechSolve Board of Directors
- 2004-present Ohio Super Computer Board of Directors
- 2005-present Ohio Aerospace Institute Board of Directors

### **MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS**

- American Chemical Society (since 1978)
- The American Society of Hematology (since 1989)
- American Society for Biochemistry and Molecular Biology (since 1989)
- The Protein Society (since 1987)
- International Society on Thrombosis and Haemostasis (since 1989)
- American Heart Association, Basic Science Council (since 1991)
- International Society of Fibrinolysis and Thrombolysis (since 1992)
- American Association for the Study of Liver Diseases (since 1993)
- National Association of State Universities and Land Grant Colleges (since 2004)

### **PATENTS**

U.S. Patent No. 5,315,000, May 24, 1994

Degen, S.J. Gene Encoding for a L5/3 Growth Factor and its cDNA

U.S. Patent No. 5,606,029, February 25, 1997

Degen, S.J. Gene for a Growth Factor and its cDNA and Protein

U.S. Patent pending (WO 02/083074 A2)

Waltz, S.E., Leonis, M.A., Degen, S.J. Methods for the Treatment of Hepatic Disorders"

## COMMITTEES

- National/International

- |              |   |
|--------------|---|
| 1990         | Member of the General Program and Organizing Committee - Tenth International Congress on Fibrinolysis,    |
| 1991         | Review for New York Academy of Sciences regarding proposal for publication of proceedings of a meeting    |
| 1992         | International Scientific Advisory Committee - Eleventh International Congress on Fibrinolysis             |
| 1994         | International Abstract Review Committee - Twelfth International Congress on Fibrinolysis                  |
| 1994-1995    | Pew Scholars Alumni Meeting Organizing Committee  |
| 1996         | International Abstract Review Committee for the XIIIth International Congress on Fibrinolysis (Barcelona) |
| 1996-present | GREAT (Graduate Research, Education and Training) Group of AAMC   |
| 2000-2002    | Women's Health Representative Committee for The American Association for The Study of Liver Diseases      |
| 2001-present | Women's Health Research Coalition, Society for Women's Health Research                                    |
| 2004-present | NASULGC, Commission on Research and Graduate Education  |
| 2005-present | Advisory Committee, Science and Society Institute   |
| 2005-present | Faculty Advisor, Executive Leadership in Academic Medicine Program for Women                              |

- American Heart Association

- |           |   |
|-----------|---|
| 1995-1999 | National, Affiliate Study Group                 |
| 2001-2004 | Southern Research Consortium Steering Committee |
| 2002-2005 | Research Committee, National                    |
| 2002-2005 | Women's Leadership Committee, National          |

### Ohio Affiliate

- |           |   |
|-----------|---|
| 1989-1997 | Research Peer Review Committee                                |
| 1995-1997 | <b>Chair</b>  |
| 1992      | Research Peer Review Committee for Summer Student Fellowships |
| 1993-1999 | Research Committee,   |
| 1995-1997 | Vice-Chair  |

### Ohio, West Virginia Affiliate

- |           |                    |
|-----------|--------------------|
| 1997-1998 | Research Committee |
| 1997-1998 | <b>Chair</b>       |
| 1998      | Board of Trustees  |

### Ohio Valley Affiliate

- |           |                     |
|-----------|---------------------|
| 1998      | Research Task Force |
| 1998-2001 | Research Committee  |
| 1998-1999 | <b>Chair</b>        |
| 1998-1999 | Board of Trustees   |

2000 Vice Chair, Summer Undergraduate Fellowship Program review committee  
2001-2004 Steering Committee

Southwest Ohio Area

1993 Teleparty” Fundraising Campaign, Night  
**Chair**  
1994 **Chair**  
1994 Ad Hoc Committee for Samuel Kaplan Award  
1996 **Chair**, Selection Committee for Samuel Kaplan Award

• Regional/Ohio

1995 Edison Biotechnology Center-Cincinnati Bio/Medical Incubation Design Advisory Committee  
1999 Sabin Award Selection Committee, BioConcepts  
2002-2003 CincyTechUSA Regional Life Sciences Growth Project  
2004-present Ohio Board of Regents, Research Officers  
2005-present Board of Directors, Ohio Super Computer  
2005-present Board of Trustees, BIO/START  
2005-present Secretary Board of Trustees, BIO/START  
2005-present Executive Committee, BIO/START  
2005-present Board of Directors, TechSolve  
2005-present Board of Directors, Ohio Aerospace Institute

• University of Cincinnati

1992-1993 University Research Council  
1993,1994 Student Summer Research Fellowship Committee  
1994 Isabel and Mary Neff Scholarship Committee  
1994-1995 GA/UGS Allocation Committee  
1997 **Chair**, The Isabel and Mary Neff Scholarship Committee  
1997 Internal Review of Graduate Programs (Group 4)  
1998,1999 University Distinguished Graduate Assistantship Selection Committee  
1997-1999 Graduate Faculty Selection Committee  
1998 Graduate Recruitment and Admissions/Student Information System Task Force  
1999 Writing Team for International Student response to the Ohio Board of Regents  
1999 Graduate Teaching/Research Effectiveness Workshop Organizing Committee  
1999-2000 **Chair**, Graduate Faculty Nominations Committee  
1999-present Steering Committee, Life Sciences Preparing Future Faculty Program  
2001 Search Committee, Director for Institutional Research  
2000-2002 Planning for the Millennium Committee  
2000-2003 Integrated Information Oversight Steering Committee  
2000-2001 Growing Your Own subcommittee on Postdocs & Graduate Students  
2001 Search Committee for Dean of the College of Allied Health  
2001 PlanetFeedback Committee

2001-2004	Diabetes Task Force
2002-2003	Institutional Management Technology Committee
2002-present	Millennium Planning Committee
2002-2003	<b>Chair</b> , MPH Task Force
2002-2004	Kitchen Cabinet for Dean of College of Allied Health
2003	Search Committee for Chief Financial Officer of UC Medical Center
2003-2004	Academic Technology Planning Committee
2003-2004	UC 21 Academic Planning Process working group
2004-present	Executive Technology Steering Committee
2004-present	Presidents Cabinet
2004-present	Chair, University Research Council
2004-present	Chair, Research Officers
2004	Chair, Search Committee for Associate Vice President for Technology Transfer and Commercialization
2004	Chair, Search Committee for Research Compliance Officer
2004-present	SAP Sponsors Committee
2004-present	UC 21 Research Committee
2005-present	Faculty Development Council
2005-present	Academic Operations Committee

- University of Cincinnati College of Medicine

1987	Focus Area Planning Group on Neonatal/OB/Pediatrics
1987-1988	Committee on Research Opportunities for MDs
1988-1991	Medical Science Scholars Committee
1989	Self-Study Analysis for College of Medicine Reaccreditation Review-Committee on Research
1989	LCME-Pediatric Dept. Accreditation
1991	Initial Inquiry Committee-charges of scientific misconduct against a faculty member
1993-1998	Committee on Graduate Education
1996-1998	<b>Chair</b> , Committee on Graduate Education
1993-present	Graduate course on Ethics in Research Planning Committee
1994	Evaluation Committee for Selection of Associate Dean for Graduate Education
1994	Selection Committee for U.C. nominee for Pew Scholar Award
1995	Committee to Review the Administrative Performance of Dr. Robin Luke, Chairman, Dept. of Internal Medicine
1995-1996	College Recruitment Committee
1995-1996	Self-study Subcommittee on Graduate Education in the Basic Medical Sciences
1995-1996	Self-study Subcommittee on Basic Sciences for the LCME site visit
1996	Wulsin M.D./Ph.D. Fellow Selection Committee
1996	Medical Student Academic Appeal Board
1997-present	Women Faculty Advisory Committee
1997-1999	North Central Accreditation (NCA)
1998-2002	Women's Health Program
1999	Recruitment Issues Task Force
2000	<b>Chair</b> , Study Section to review grants in response to RFP in Research on Breast Cancer and The Environment, Women's Health Program
2000	Revision of College of Medicine Reappointment, Promotion and Tenure Criteria

	Committee
2000	Centers of Excellence for the Alliance and College of Medicine Committee
2000	Internal Review Committee, Ohio Eminent Scholar Program
2001	Internal Review Committee, Pew Scholars Program and HHMI Clinical Investigator Award
2001	Committee to Review the Administrative Performance of Dr. Cecilia Fenoglio, Chair of Department of Pathology
2002-present	Academic Information Technology Advisory Committee
2002	Medical Center Web Site Committee
2002-2004	LCME Committee on Educational Programs for MD Degree
2004-2005	Search Committee for Dean of the College of Medicine
2005	Clinical Research Task Force

- Department of Pediatrics (University of Cincinnati College of Medicine)

1986	Coagulation Task Force for Preparation of NIH Sickle Cell Grant
1986-1987	Procter Scholarship Program Selection Committee
1986-1988	Children's Hospital Research Foundation Seminar Committee
1987,1992	Nominations Committee for Promotions and Tenure
1987-1988	Cardiology Division Director Search Committee
1988-1995	Operation Committee for Cardiology Research Training Grant on "Cardiovascular Diseases of the Young"
1989-1990	Evaluation of FIRM Concept of Teaching, Children's Hospital Medical Center
1991-1995	Hematology/Oncology Division Director Search Committee
1994-present	Reappointment, Promotion and Tenure Committee
1996-present	<b>Chair</b> , Reappointment, Promotion & Tenure Committee
1994-present	Internal Reviewer of Grant Applications
1995-1997	Developmental Biology Research Division Chairman Search Committee
1997-2005	<b>Chair</b> , Schmidlapp Woman Scientist Program
2000-present	Reviewer, Trustee Grant Applications
2001-present	Academic Family Life Committee
2002	<b>Chair</b> , Review of Hem/Onc Fellowship Program
2003	Education Committee

- Children's Hospital Medical Center

1988-1991	New Research Building Committee
1989-1998	Research Position Review Panel
1991-1993	<b>Chair</b> , CHRF Building Advisory Committee
1993	<b>Chair</b> , Grievance Committee
1994-1995	<b>Chair</b> , Conflict Resolution Panel
1996-1997	Technical Committee for New Research Building
2001-present	Strategic Initiative Task Force
2000-present	Research Website Committee
2002-present	Research Newsletter Committee
2004-present	PeopleSoft Steering Committee
2004-present	Implementation Committee for Education/Leadership Development

work group, Strategic Planning Process  
2004-present Chair, Subcommittee for Scientist Education, Strategic Planning Process  
2004-present Leadership and Management Subcommittee, Strategic Planning Process

- Division of Developmental Biology

2001-2004 Organizer, Division Meetings  
2001 Co-organizer, Division Retreat  
2001-2003 New Faculty Search Committee

- Molecular and Developmental Biology Graduate Program (UC College of Medicine)

1988-1998 Ryan Fellowship Nomination Committee  
1991-1993 Developmental Biology Training Grant Committee  
1993-2004 Admissions Committee  
1993-1995 Initial Advisory Committee  
1993-1995 Director of Graduate Studies  
1995-1998 **Program Director**  
2001-2004 Revision of website

- Molecular and Cellular Biology Graduate Program (UC College of Medicine)

1994-1995 Graduate Committee, Cell Biology Graduate Program  
2000-2004 Qualifying Exam Committee

### OTHER ACTIVITIES

1978-1980 University of Washington, Department of Biochemistry - Curriculum Committee  
1980-1982 University of Washington, Department of Biochemistry - Graduate Student President  
1979-1981 Washington State Special Olympics - State Staff-Statistician and Coach  
1980-1981 Washington State Special Olympics - State Staff-Evaluations Committee and  
1990-1993 Child Care Advisory Committee, Children's for Children  
1991 Hamilton County Tax Levy (Terrace Park Coordinator)  
1994-1995 Brownie Troop Leader  
1995 Focus Group, Mariemont School System  
1995 Mariemont School Tax Levy Campaign-Block Committee  
2003-present Impact 100

### PEER REVIEW ACTIVITIES

- Editorial Boards

Journal of Biological Chemistry (2001-2004)  
Gene Editor, HUGO Mutation Database (2001-present)

- Journals

Biochemistry  
Journal of Biological Chemistry  
Oncogene  
Journal of Clinical Investigation  
Blood  
Proceedings of the National Academy of Sciences, USA  
Molecular Biology of the Cell  
Thrombosis and Hemostasis

- Grant Reviews

1989-1997	American Heart Association - Ohio Affiliate
1990	NIH Hematology I study section, Special Reviewer
1988	Biochemistry Program Grant, National Science Foundation
1992	NIH Hematology II study section, Ad Hoc Reviewer
1993-1996	NIH Hematology II study section, Regular Member
1995	NIH RFP on Liver Procurement, Ad Hoc Reviewer
1995-1998	American Heart Association-National; Affiliate Study Group
1996-2000	American Cancer Society-National; Cell Cycle and Growth Control Study Section
1997	NIH Hematology II study section, Ad Hoc Reviewer
1998	Chair, NIH RFP on Liver Procurement
1998	NIH Hematology I study section, Ad Hoc Reviewer
1999	NIH NHLBI Special Review Committee-Membrane Proteins in Blood Coagulation PPG
1999	Dept. of Veteran Affairs Medical Research Service, review of Merit Review grant proposal
1999	NIH Hematology II study section, Ad Hoc Reviewer
2000	NIH NHLBI Special Review Committee - RFA on "Development of Mouse Phenotypic Screens"
2001	NIH NHLBI Special Review Committee for a PPG
2001, 2002	Dept. of Veteran Affairs Medical Research Service, review of Merit Review Grant Proposals
2001	NIAID Special Emphasis Panel (SEP) "Role of Complement in Diseases and Development"
2002-present	NIH Metabolic Pathology (MEP) study section, Ad Hoc Member
2002	American Cancer Society, National grant review
2002	NIH Special Emphasis Panel, ZRG-1 SSS-1
2003	NIH Hematology II study section, Ad Hoc Reviewer
2003	NIH Special Emphasis Panel, ZRG CAMP
2004	Welcome Trust Fellowship Review

- Abstracts

1999	The American Society of Hematology, 41 <sup>st</sup> Annual Meeting "Coagulation & Fibrinolytic Factors"
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### **INVITED CHAIRED SESSIONS AT MEETINGS**

Moderator for Session on Thrombosis at American Society of Hematology meeting, Seattle, Wash., December 4, 1995.

XIIth Congress of the International Society on Thrombosis and Haemostasis, Tokyo, Japan, August 19-25, 1989. Session on "Coagulation."

Tenth International Congress on Fibrinolysis, Indianapolis, Ind., August 4-8, 1990. Session on "Gene Regulation/Transcription."

41<sup>st</sup> Annual Meeting of The American Society of Hematology, New Orleans, LA Dec 3-7, 1999. Session on "Coagulation and Fibrinolytic Factors: In Mouse and Man."

### **ORGANIZER**

Invited organizer for session on Transgenic Mice and Gene Therapy at Gordon Conference on Hemostasis, June, 1991, Vermont.

Invited organizer for session on "The Ron/STK receptor tyrosine kinase in development and oncogenesis" at the FASEB meeting on "Growth factor tyrosine kinases in mitogenesis, morphogenesis and tumorigenesis" to be held in Snowmass, CO from August 4-9, 2001.

Joint Symposia between the University of Cincinnati, Cincinnati Children's Hospital and Procter and Gamble Pharmaceuticals (twice yearly), May and November 2001, May and December 2002.

University of Cincinnati Futuristic Forums, 2002.

### **INVITED PARTICIPANT**

Ciba Foundation Symposium No. 212 on Plasminogen-related Growth Factors held in London, England on April 8-10, 1997.

1<sup>st</sup> Annual conference on "Sex and Gene Expression" by Society for Women's Health Research, Winston-Salem, NC March 2-5, 2000.

Represented Dean of the College of Medicine at the 2000-2001 Executive Leadership in Academic Medicine Program for Women, Philadelphia, PA, April, 2001.

"Meet the Leader" at the 2001-2002 Executive Leadership in Academic Medicine Program for Women, Philadelphia, PA September 10-11, 2001.

"Encouraging Students Toward an Academic Career" for the WIM Breakfast with Council of Academic Societies at the 2002 AAMC Annual Meeting, San Francisco, CA, November 11, 2002.

Howard Hughes Medical Institute/Burroughs Welcome Foundation Partners in Scientific Management

Program 2004-2005.

## EXTERNAL REVIEWER

W.W. Keck Center for Transgene Research, University of Notre Dame, Oct. 1, 1999.

## GRADUATE STUDENT COMMITTEES

- Developmental Biology Program

Present:

Yoni Mahller

Trisha Wise-Draper

Past (year of Ph.D. defense):

Carolyn Zelnick (1988)

David Lattier (1989)

Michael O'Reilly (1989)

Diane Lund (1989)

Bin Wang (1990)

Satbir Kaur (1991)

Bryan Burkey (1991)

Martha Stauderman (1991)

Aoshuang Chen (1992)

Kersten McLain (1993)

Karen Yager (1994)

Dorothy Supp (1994)

Diane Vorbroker (1994)

Teresa Whitaker (1995)

Dennis Thomas (1995)

Rob Powers (1996)

Tracy Haynes (1996)

Mary Beth Thomas (1996)

Hsiu Mei Hsieh-Li (1996)

Debi Swertfeger (1996)

Kate Hagen (1997)

Chris Tobin Fitzgerald (1997)

Tony Brickner (1998)

Claudia Henemyer (1998)

Tom Reed (1998)

Karla Hess (1999)

Rashmi Nemade (2000)

Kathleen Smyth (2001)

Kris Steinbrecher (2001)

Arthur Barrie III (2001)

Pierre-Yves Berclaz (2002)

David Plank (2003)

Carrie Brown (2005)

Zainab Abbas (Master's defense, 1997)

Kevin McFarland (Master's defense, 1999)

Ebony Evans (Master's defense, 2000)

- Other UC Graduate Programs

Past (year of PhD defense):

Harshini de Silva

Department of Pharmacology and Cell Biophysics (1989)

Chia-Yang Liu	Interdisciplinary Program Biological Chemistry (1993)
Gary Martin	Dept. of Cell Biology, Anatomy and Neurosciences (1997)
Kathy Lee	Dept. of Molecular Genetics, Biochemistry and Microbiology (1999)
Jacquelyn McEntire	Dept. of Cell Biology, Anatomy & Neurosciences (Masters, 2000)
Julie Piechan	Dept. of Molecular Genetics, Biochemistry & Microbiology
Elizabeth Hellman	Genetic Counseling Graduate Program (Masters, 2002)

Outside Reader:

Thesis by Hsiao-Ling Hong, "Molecular basis of liver specific transcription of blood coagulation factor X," University of Pennsylvania, Department of Pathology, August, 1995

**PAST AND PRESENT TRAINEES**

• Graduate Student Supervisor

Su Han (Ph.D. in 1991)  
LaTonya Clay (Masters in 1997)  
Rebecca (Burt) Muraoka (Ph.D. in 1998)

• Post-Doctoral Fellows

1987-1992	C. Scott Jamison, Ph.D
1987-1993	Mary Jo Danton, Ph.D.
1995-1996	Frank Pu, Ph.D.
1994-1997	Susan Waltz, Ph.D. Awarded NIH NRSA Postdoctoral Fellowship
1998-2000	Michael Hughes, Ph.D. Awarded a position on the NIH Perinatology Training Grant
1999-2002	Karla Hess, Ph.D. Awarded NIH NRSA Postdoctoral Fellowship
1999-2002	Cindy Wetzel, Ph.D. Awarded a position on the NIH Cellular Growth and Differentiation Training Grant

• Fellows

1990	Bill Pietra, M.D.
1991-1992	Jorge Bezerra, M.D.

• Research Associates

1994-2003	William (Yading) Sun, Ph.D. Awarded AHA, Ohio Affiliate Postdoctoral Fellowship, 1996- 1997 and 1997- 1999
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- Procter Scholars

1987-1990 Christopher W. Clardy, M.D.  
1989-1992 John Bancroft, M.D.  
1992-1994 Jorge Bezerra, M.D.

- Sponsor

1995-2000 Jorge Bezerra, M.D.  
KO8 Award from NIH

- Visiting Scientists

1992-1993 Makado Matsuyuki  
1993-1994 Tazawa Yusaku

- Residents

2000-2002 Arlene Dent

- Medical Students

1993 Don Stephens (Alpha Omega Alpha Student Research Fellowship)

- Summer Undergraduate Students

1991 Denise Rodney  
1992 Jennifer Hauser  
1992 Amy Ruschulte  
1994-1996 Ellen Air  
AHA Summer Undergraduate Research Fellowship (1994)  
1994 Rebecca Roman  
1995 Antonio Avenido  
AHA Summer Undergraduate Research Fellowship  
1996-1997 John Eckman  
AHA Summer Undergraduate Research Fellowship  
1997-2000 Theresa Bruno  
1997 Meredith Merz  
AHA Summer Undergraduate Research Fellowship  
1997-1999 Matthew Ziegler  
1998-1999 Jeff Ihlendorf  
1998 Jenni Prosperi  
1999 Camille Browne  
1999 Jonah Knobler  
2000, 2002 Nirav Kapadia

2001, 2002	Robyn Gorman AHA Summer Undergraduate Research Fellowship
2001,2002	Meredith Olson
2001	Kara Hill
2001	Rose DeGrauw
2002, 2003	Matthew Moore
2003	Jacki Brandiwie
2004, 2005	Anne Greenberg
2004	Manisha Patel

- High School Students

1993	Ellen Air
1993-1994	Liz Otte
1994-1996	Sarah Bartlett
1994-1996	Sallie Rademacher
1998	Lauren Wagner
1998-1999	Shauna Pickett
1998-1999	Rebecca Daniels
1999-2000	Kara Hill
2000	Rose DeGrauw
2002, 2003	Anne Greenberg
2004, 2005	Emily Greenberg

- Foreign Exchange Students

1991-1992	Claire Read
1994-1995	Fiona Gould
1995-1996	Christie Toms

- High School Teacher

1996	Joan Lewis American Society of Biochemistry and Molecular Biology High School Teacher Fellowship
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## TEACHING EXPERIENCE

- **Courses**

1977	Teaching Assistant- Biochemistry 440
1978	Teaching Assistant- Biochemistry 444
1978	Teaching Assistant - Biochemistry 405
1978	Teaching Assistant - Biochemistry 408

1987-1989	Developmental Biology Graduate Course, one-two lectures per course
1987	Developmental Biology Graduate Student Journal Club
1990,1992	Medical Biochemistry Course, 1 lecture per course
1990-1993	Developmental Biology Graduate Course, Organizer
1993	Resident Research Seminar, one lecture
1999	Ethics in Research Course, 1 lecture, 3 small group discussions
2000	Ethics in Research Course, 1 lecture, and small group discussion
2000	Adult Learning Course "Mentoring/advising the adult learner" 1 lecture/discussion
2000	Journal Club, Molecular and Developmental Biology Graduate Students 3 classes
2001	Ethics in Research Course, 1 lecture
2002	Ethics in Research Course, 1 lecture
2003	Ethics in Research Course, 1 lecture
2004	Ethics in Research Course, 1 lecture
2005	Ethics in Research Course, 1 lecture

- **Laboratory Rotations**

#### Graduate Program in Developmental Biology

1987	Winter	Su Han
1987	Winter	Bethanie Heineke
1987	Summer	Andy Morice
1987	Fall	Sheila Bell
1989	Summer	Bonnie Richmond
1990	Fall	Debi Krauth
1993	Winter, Spr	Lan Zhou
1994	Winter	Rebecca Burt
1995	Winter	Zainab Abbas
1995	Spring	Peng Jin
1995	Summer	Scott Miller
1996	Winter	LaTonya Clay
1996	Summer	John Kiser
2000	Fall	Emily Martin

#### Other Programs at UC

1988	Summer	Carla Jones	MARC Summer Research Program
1990-91	Summer	Barry Wendt	M.D./Ph.D. Program
1993	Fall	Vince Read	M.D./Ph.D. Program
1994	Winter	Dawn Valasky	Sarah Lawrence, Human Genetics

## PUBLICATIONS

1. Doolittle, R.F., Cassman, K.G., Cottrell, B.A., **Friezner, S.J.**, Hucko, J.T., and Takagi, T. Amino acid sequence studies on the  $\alpha$  chain of human fibrinogen. Characterization of 11 cyanogen bromide fragments. *Biochemistry* 16: 1703-1709, 1977.
2. Doolittle, R.F., Cassman, K.G., Cottrell, B.A., **Friezner, S.J.**, and Takagi, T. Amino acid sequence studies on the  $\alpha$  chain of human fibrinogen. Covalent structure of the  $\alpha$ -chain portion of fragment D. *Biochemistry* 16: 1710-1715, 1977.
3. Doolittle, R.F., Cassman, K.G., Cottrell, B.A., and **Friezner, S.J.** Amino acid sequence studies on the  $\alpha$  chain of human fibrinogen. Isolation and characterization of two linked  $\alpha$ -chain cyanogen bromide fragments from fully cross-linked fibrin. *Biochemistry* 16: 1715-1719, 1977.
4. Doolittle, R.F., Takagi, T., Watt, K., Bouma, H., III, Cottrell, B.A., Cassman, K.G., Goldbaum, D.M., Doolittle, L.R., and **Friezner, S.J.** The structures of fibrinogen and fibrin. *FEBS Vol. 47, Symp. A6, Regulatory proteolytic enzymes and their inhibitors.* pp. 163-172, 1977.
5. MacGillivray, R.T.A., **Degen, S.J. Friezner**, Chandra, T., Woo, S.L.C., and Davie, E.W. Cloning and analysis of a cDNA coding for bovine prothrombin. *Proc. Natl. Acad. Sci. USA* 77: 5153-5157, 1980.
6. Kurachi, K., Chandra, T., **Degen, S.J. Friezner**, White, T.T., Marchioro, T.L., Woo, S.L.C., and Davie, E.W. Cloning and sequence of cDNA coding for  $\alpha_1$ -antitrypsin. *Proc. Natl. Acad. Sci. USA* 78: 6826-6830, 1981.
7. **Degen, S.J. Friezner**, MacGillivray, R.T.A., and Davie, E.W. The structure of the human prothrombin gene and a related gene. In: Manipulation and Expression of Genes in Eukaryotes, P. Nagley, A.W. Linnane, W.J. Peacock, and J.A. Pateman, eds., Academic Press, Sydney, pp. 13-16, 1983.
8. Degen, J.L., Neubauer, M.G., **Degen, S.J. Friezner**, Seyfried, C.E., and Morris, D.R. Regulation of protein synthesis in mitogen-activated bovine lymphocytes. Analysis of actin-specific and total mRNA accumulation and utilization. *J. Biol. Chem.* 258: 12153-12162, 1983.
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10. Davie, E.W., **Degen, S.J. Friezner**, Yoshitake, S., and Kurachi, K. Cloning of vitamin K-dependent clotting factors. *Dev. Biochem.* 25: 45-52, 1983.
11. Davie, E.W., Chung, D.W., **Degen, S.J. Friezner**, Kurachi, K., Rixon, M.W. and Yoshitake, S. The cloning of blood coagulation factors. In: ICSU Short Reports-Advances in Gene Technology: Human Genetics Disorders. Ahmad et al., eds. *Proc. 16<sup>th</sup> Miami Winter Symp.*, Vol. 1, pp. 100-103, 1984.

12. Rajput, B., **Degen, S.J. Friezner**, Reich, E., Waller, E.K., Axelrod, J., Eddy, R.L., and Shows, T.B. Chromosomal locations of human tissue plasminogen activator and urokinase genes. *Science* 230: 672-674, 1985.
13. **Degen, S.J. Friezner**, Rajput, B., Reich, E. and Davie, E.W. Coagulation and fibrinolysis: characterization of the human prothrombin and human tissue plasminogen activator genes. In: Protides of the Biological Fluids. 33. H. Peeters, ed. Pergamon Press, Oxford, pp. 47-50, 1985.
14. Rajput, B., **Degen, S.J. Friezner**, Reich, E., and Shows, T.B. Mapping tissue plasminogen activator and urokinase genes to human chromosomes. In: Protides of the Biological Fluids. Vol. 33. H. Peeters, ed. Pergamon Press, Oxford, pp. 99-101, 1985.
15. Davie, E.W., and **Degen, S.J. Friezner**. Human prothrombin: Its structure, function, and gene. In: Cellular Regulation and Malignant Growth: Lipmann Symposium. S. Ebashi, ed. Japan Scientific Societies Press, pp. 3-8, 1985.
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22. Bancroft, J.D., Schaefer, L.A., and **Degen, S.J.Friezner** Characterization of the Alu-rich 5' flanking region of the human prothrombin-encoding gene: identification of a positive cis-acting element that regulates liver-specific expression. *Gene* 95: 253-260, 1990.
23. Jamison, C.S. and **Degen, S.J.Friezner** Prenatal and postnatal expression of mRNA coding for rat prothrombin. *Biochim. Biophys. Acta* 1088: 208-216, 1991.
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26. **Degen, S.J. Friezner**, Stuart, L.A., Han, S. and Jamison, C.S. Characterization of the mouse cDNA and gene coding for a hepatocyte growth factor-like protein: Expression during development. *Biochemistry* 30: 9781-9791, 1991.
27. **Degen, S.J. Friezner**. The prothrombin gene and its liver-specific expression. *Seminars in Thromb. Haem.* 18: 230-242, 1992.
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32. Bancroft, J.D., McDowell, S.A. and **Degen, S.J. Friezner**. The human prothrombin gene: transcriptional regulation in HepG2 cells. *Biochemistry* 31: 12469-12476, 1992.
33. Han, S. and **Degen, S.J. Friezner**. Genomic organization, chromosomal localization and developmental expression of hepatocyte growth factor-like protein. In: Hepatocyte Growth Factor/Scatter Factor and the c-Met Receptor. I.D. Goldberg and E. Rosen, eds. Birkhauser Verlag Co., Switzerland, pp. 81-105, 1993.
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  39. Bezerra, J.A., Laney, D.W., Jr. and **Degen, S.J. Friezner** Increased expression of mRNA for hepatocyte growth factor-like protein during liver regeneration and inflammation. *Biochem. Biophys. Res. Comm.* 203: 666-673, 1994.
  40. **Degen, S.J. Friezner**. Prothrombin. In: *Molecular Biology of Thrombosis and Hemostasis*. H. Roberts and K. High, eds. Marcel Dekker, Inc., New York, pp. 75-99, 1995.
  41. **Degen, S.J. Friezner**, McDowell, S.A., Sparks, L.M. and Scharrer, I. Prothrombin Frankfurt: a dysfunctional prothrombin characterized by substitution of Glu-466 by Ala. *Thromb. Haemost.* 73: 203-209, 1995.
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  43. Waltz, S.E., Gould, F.K., Air, E.L., McDowell, S.A. and **Degen, S.J. Friezner**. Hepatocyte Nuclear Factor-4 is responsible for the liver-specific expression of the gene coding for hepatocyte growth factor-like protein. *J. Biol. Chem.* 271:9024-9032, 1996.
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  46. Bezerra, J.A., Carrick, T.L., Degen, J.L., Witte, D. and **Degen, S.J.F.** Biological effects of the targeted inactivation of hepatocyte growth factor-like protein in mice. *J. Clin. Invest.* 101:1175-1183, 1998.
  47. **Degen, S.J.F.**, McDowell, S.A., Waltz, S.E., Gould, F., Stuart, L.A. and Carritt, B. Structure of the human D1F15S1A locus: a chromosome 1 locus with 97% identity to the chromosome 3 gene coding for hepatocyte growth factor-like protein. *DNA Sequence* 8:409-413, 1998.
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51. Sun, W.Y., Ruiz-Saez, A., Burkart, M.C., Bosch, N. and **Degen, S.J.F.** Prothrombin Carora: Hypoprothrombinemia caused by substitution of Tyr-44 by Cys. *British J. Haematology* 105:670-672, 1999.
52. Muraoka.S., Sun, W.Y, Colbert, M.C., Waltz, S.E., Witte, D.P., Degen, J.L. and **Degen, S.J.F.** The Ron/STK receptor tyrosine kinase is essential for peri-implantation development in the mouse. *J. Clin. Invest.* 103:1277-1285, 1999.
53. Sun, W.Y., Burkart, M.C., Holahan, J.R. and **Degen, S.J.F.** Prothrombin San Antonio: A single amino acid substitution at one of the Factor Xa activation sites (Arg320 to His) results in dysprothrombinemia. *Blood* 95:711-714, 2000.
54. Sun, W.Y. and **Degen, S.J.F.** Gene targeting in hemostasis: prothrombin. *Frontiers in Bioscience* 6, d222-238 (2001).
55. Sun, W. Y., Smirnow, D., Jenkins, M. L. and **Degen, S.J.F.** Prothrombin Scranton: substitution of an amino acid residue involved in the binding of Na<sup>+</sup> (Lys-556 to Thr) leads to dysprothrombinemia. *Thromb. Haemost.* 85, 651-654 (2001).
56. Waltz, S. E., Eaton, L., Toney-Earley, K., Hess, K.A., Ihlendorf, J.R., Kaestner, K.H. and **Degen, S.J.F.** Ron-mediated cytoplasmic signaling is dispensable for viability but is required to limit inflammatory responses. *J. Clin. Invest.* 108, 567-576 (2001).
57. Peace, B.E., Hughes, M.J., **Degen, S.J.F.**, and Waltz, S.E. Point mutations and overexpression of Ron induce transformation, tumor formation and metastasis. *Oncogene* 20, 6142-6151 (2001).
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59. **Degen, S.J.** "Women scientists should be role models." OpEd in *Cincinnati Enquirer*, April 15, 2002.
60. Leonis, M.A., Toney-Earley, K., **Degen, S.J.F.** and Waltz, S.E. Deletion of the Ron receptor tyrosine kinase domain in mice provides protection from endotoxin-induced acute liver failure. *Hepatology* 36, 1053-1060 (2002).

61. Sun, W.Y., Coleman, M.J., Witte, D.P. and **Degen, S.J.F.** Rescue of prothrombin-deficiency by transgene expression in mice. *Thrombosis & Hemostasis* 88, 984-991 (2002).
62. Hess, K.A., Waltz, S.E., Chan, E.L. and **Degen, S.J.F.** Receptor tyrosine kinase Ron is expressed in mouse reproductive tissues during embryo implantation and is important in trophoblast cell function. *Biol Reprod* 68, 1267-1275 (2003).
63. Wetzel, C.C., **Degen, S.J.F.** and Waltz, S.E. cis-Acting elements in the hepatocyte growth factor-like protein gene regulate kidney and liver-specific expression in mice. *DNA and Cell Biology* 22, 293-301 (2003).
64. Hess, K.A., Waltz, S.E., Toney-Earley, K. and **Degen, S.J.F.** The receptor tyrosine kinase Ron is expressed in the mouse ovary and regulates inducible nitric oxide synthase levels and ovulation. *Fertility and Sterility* 80S2, 747-754 (2003).
65. Peace, B.E., Hill, K.J., **Degen, S.J.F.** and Waltz, S.E. Cross-talk between the receptor tyrosine kinases Ron and epidermal growth factor receptor. *Experimental Cell Res.* 289, 317-325 (2003).
66. Wu, J., Wang, Y., Xiao, W., Meyer, K.B., Schmidt, K., Morris, R.E., **Degen, S.J.F.** and La Barbera, A.R. Assessment of recombinant porcine follicle-stimulating hormone receptor using a novel polyclonal ectodomain antibody. *Endocrine Res.* 30, 269-285 (2004).
67. Kahn, J.A., **Degen, S.J.F.**, Mansour, M., Goodman, E., Zeller, M. H., Laor, T., Lanphear, N. E. and Boat, T. F. Pediatric faculty members' attitudes about part-time faculty positions and policies to support part-time faculty: A study at one medical center. *Academic Medicine* 80, 931-939 (2005).

## INVITED LECTURES ON RESEARCH (Since 1994)

### International/National

- “Hepatocyte Growth Factor-like Protein,” presented at Amgen, Thousand Oaks, California, April 4, 1994.
- “Hepatocyte Growth Factor-like Protein,” presented at the University of Washington, Department of Biochemistry, Seattle, Washington, April 6, 1994.
- “Hepatocyte Growth Factor-like Protein,” presented at Stanford University, Stanford, California, January 12, 1996.
- “Hepatocyte Growth Factor-like Protein,” presented at Scripps Research Institute, La Jolla, California, January 19, 1996.
- “Lethal Hemorrhage in Mice Lacking Prothrombin,” presented at the FASEB Meeting on “Vitamin K and Synthesis, Structure and Function of Vitamin K Dependent Protein,” Saxtons River, Vermont, August 2-7, 1997.
- “Hepatocyte Growth Factor-like Protein and Its Receptor: A Search for Their Biological Function,” presented at Wright State University, Department of Biochemistry and Molecular Biology, October 31, 1997.
- “Expression of the Receptor Tyrosine Kinase Ron is Required for Embryonic Development” presented at the FASEB Meeting on “Mechanisms of Liver Growth and Differentiation in Health and Disease” Snowmass, CO, July 11-16, 1998.
- “Transgenic Approaches to Correcting Prothrombin Deficiency in Mice” presented at the FASEB Meeting on “Vascular Biology and Thrombin” Whitefish, Montana, June 9-14, 2001.
- “The Biology of the Ron Tyrosine Kinase” presented at the FASEB Meeting on “Growth Factor Receptor Tyrosine Kinases in Mitogenesis, Morphogenesis and Tumorigenesis” Snowmass, CO, August 4-9, 2001.

### Local

- “Hepatocyte Growth Factor-like Protein,” presented at Dept. of Pathology and Laboratory Medicine, University of Cincinnati, Cincinnati, Ohio, February 3, 1994.
- “Hepatocyte Growth Factor-like Protein,” presented at Div. of Hematology/Oncology, Children’s Hospital Medical Center, Cincinnati, Ohio, January 22, 1996.
- “Hepatocyte Growth Factor-like Protein and Its Receptor: A Search for Their Biological Function,” presented at Children’s Hospital Research Foundation, Cincinnati, Ohio, April 16, 1997.
- “Hepatocyte Growth Factor-like Protein: Structure, Function, and Regulation,” presented at Molecular Medicine Research Seminar Series, Children’s Hospital Research Foundation, Cincinnati, Ohio, November 7, 1997.
- “Prothrombin-Structure and Function,” a Celebration Honoring Virginia Donaldson, Children’s Hospital Medical Center, Cincinnati, Ohio, May 16, 1998.
- “The Puffer Fish and What It Can Tell Us,” presented at Developmental Biology Cutting Edge Seminar Series, Children’s Hospital Research Foundation, Cincinnati, Ohio, November 9, 1998.
- “Expression of the Receptor Tyrosine Kinase Ron is Required for Embryonic Development” presented at Dept. of Molecular Genetics, Biochemistry and Microbiology, University of Cincinnati, January 19, 1999.
- “Novel Genes Involved in Embryonic and Cellular Invasion” presented in the Molecular Medicine Research Seminar Series, Children’s Hospital Research Foundation, Cincinnati, Ohio, December 13, 1999.

“Transgenic Approaches to Understanding the Biology of Kringle-Containing Proteins and Their Receptors” presented at the College of Pharmacy, University of Cincinnati, March 3, 2004.

## **INVITED LECTURES-OTHER TOPICS (Past 5 years)**

### National

- “Research and the AHA” presented at AHA-Ohio, West Virginia Affiliate Annual Leadership Training Conference, Columbus, Ohio, November 21, 1997.
- “Professional Pointers: Career Development Issues for Junior to Mid-level Professionals,” presented at Infectious Disease Society of America 36<sup>th</sup> Annual Meeting, Denver, Colorado, November 12, 1998.
- "Encouraging Students Toward an Academic Career" for WIM Breakfast with Council of Academic Societies, at AAMC Annual Meeting, San Francisco, CA, November 11, 2002.

### Local

- “RPT Guidelines: Reading Between the Lines,” with Dr. Gregory Grabowski presented at Children’s Hospital Medical Center Women’s Faculty Association, February 14, 1997.
- “Academic Advancement, Moving On and Up,” panel discussion for Children’s Hospital Medical Center Women’s Faculty Association, November 14, 1997.
- “Schmidlapp Mentoring Program and Leadership Training Program” presented at Children’s Hospital Medical Center Women’s Faculty Association, January 9, 1998.
- “Women in Medicine” presented at Pediatric Psychology Colloquium at Children’s Hospital Medical Center, February 2, 1998.
- “Proposals to the American Heart Association National Office,” presented at Children’s Hospital Research Foundation, April 3, 1998.
- “Title, Abstract and Supplementary Information,” for “Critical Aspects of Grant Proposals” course presented at Children’s Hospital Research Foundation, April 9, 1998.
- “Community Membership: The RPT Process,” Panel Discussion at University of Cincinnati New Faculty Orientation, September 14, 1998.
- “Proposals to the American Heart Association Ohio Valley Affiliate,” Children’s Hospital Research Foundation, October 6, 1998.
- “Faculty Roundtable on RP&T and Mentoring,” at the All University Faculty Retreat, University of Cincinnati, October 22, 1998.
- “Women in Science” presented at the Undergraduate Visitation Program, University of Cincinnati College of Medicine, November 18, 1998.
- “Women in Academia” for Pediatric Psychology Colloquium, Children’s Hospital Medical Center, May 3, 1999.
- “Community Membership: The Reappointment, Promotion and Tenure Process” at the University of Cincinnati New Faculty Orientation, Sept. 13, 1999.
- “Career Opportunities in Clinical/Basic Science Research” Panel Discussion for Introduction to Clinical Research Curriculum, Children’s Hospital Medical Center, Sept. 28, 1999.
- “How to Manage People Effectively: Maximizing Output and Job Satisfaction” Panel Discussion, Children’s Hospital Medical Center, December 7, 1999.
- “Keeping Life in Perspective: Balancing Personal and Professional Lives,” Postdoctoral Fellowship Professional Development Seminar, Children’s Hospital Medical Center, March 17, 2000.
- “Title, Abstract and Supplementary Information,” for “Critical Aspects of Grant Proposals” course presented at Children’s Hospital Research Foundation, March 21, 2000.
- “Funding Opportunities in Clinical Research” panel discussion for Introduction to Clinical Research Session, Children’s Hospital Medical Center, April 25, 2000.

- “Community Membership: The Reappointment, Promotion and Tenure Process” at the University of Cincinnati New Faculty Orientation, Sept. 11, 2000.
- “Research and Health Issues: Making Sense of the Science” panel discussion for the annual Science Education Conference, Cincinnati, OH, February 16, 2001.
- “Leadership” panel discussion for the Women’s Leadership Program Workshop at the University of Cincinnati, March 5, 2001.
- “Hemophilia and Genomics” Panel Discussion for the University of Cincinnati Medical Campus Science Form, May 24, 2001.
- “Basic Research in Pediatrics” for High School Summer Clerkship, June 28, 2001
- “What is The Community?-UC Structure, Mission, and Priorities” Panel Discussion at the University of Cincinnati New Faculty Orientation, Sept. 14, 2001.
- “What Happens After you Get the Job? Balancing Life and Career” for Psychology Fellows, April 12, 2002
- “Research Careers” for High School Science Student Symposium, April 17, 2002
- “Budget and the NIH Review Process” for Cincinnati Children's Research Foundation, November 7, 2002.
- “Motivating and Improving Faculty Performance; A Workshop for Academic Unit Heads” Panel Discussion, University of Cincinnati, April 30, 2003.
- “NIH 201: So What Really Happens to a Proposal Behind Closed Doors?” for Cincinnati Children’s Research Foundation, October 30, 2003
- “Agency Update: American Heart Association” for Cincinnati Children’s Research Foundation, November 20, 2003.
- “Mentoring” Panel discussion, Women’s Faculty Association, Cincinnati Children’s Research Foundation, January 22, 2004.

## PRESENT GRANT SUPPORT

NIH (DK58182), "The biology of Ron, the HGF-like protein receptor," (S.J.F. Degen, P.I., 5% effort), 5/01-4/05 (one year no cost extension to 4/06), Total Direct Costs = \$765,000

Charlotte R. Schmidlapp Trust (Fifth Third Bank), "Center for Career Development of Women in Academic Pediatrics," (S.J.F. Degen, PI, 5% effort), 4/05 – 3/09, Total Direct Costs = \$1,500,000.

- Training Grants

NIH Training Grant (HL07752), "Pulmonary and Cardiovascular Development," (J.A. Whitsett, P.I.; S. Degen on Training Faculty and Executive Committee), 1994-present

NIH Training Grant (DK07727), "Pediatric Gastroenterology and Nutrition Training Grant (M. Cohen, P.I.; S. Degen on Executive Committee and Training Faculty), 7/95-present

NIH Training Grant (HL07382), "Training in Cardiovascular Biology," (A. Schwartz, P.I., S. Degen on Training Faculty), 7/96-present

NIH Training Grant (HD07463), "Training in Developmental and Perinatal Endocrinology," (S. Handwerger, P.I.; S. Degen on Training Faculty), 11/99-present

NIH Training Grant (CA59268), "Regulation of Cellular Growth and Differentiation," (S. Khan, P.I.; S. Degen on Training Faculty), 7/01-present

NIH Training Grant (ES10957), "Molecular Epidemiology in Environmental Health," (G. LeMasters, P.I.; S. Degen on Training Faculty and on Admissions, Recruitment and Retention Committee), 4/01-present.

## PAST GRANT SUPPORT

- Extramural

NIH (R29 HL38232), "Human Blood Coagulation and Vitamin K," (S.J.F. Degen, P.I.), 4/87-3/93, Total Direct Costs=\$329,306

American Heart Association-Ohio Affiliate, "Domains of Coagulation and Fibrinolytic Proteins," (S.J.F. Degen, P.I.), 7/87-6/88, Total Direct Costs=\$15,000

Pew Scholars Program from the Pew Memorial Trust, "Biosynthesis and Tissue Specific Expression of Human Prothrombin," (S.J.F. Degen, awardee), 7/87-6/93, \$50,000/year, Total Direct Costs=\$200,000

American Heart Association National Grant-in-Aid, "Domains of Coagulation and Fibrinolytic Proteins," (S.J.F. Degen, P.I.), 7/88-6/91, Total Direct Costs=\$90,000

- American Heart Association Local Grant-in-Aid (SW-90-19), "Genomic Variations of Coagulation Factor XII (Hageman Factor) Expression," (A. Kier, P.I.; S. Degen, CoInvestigator, 5% time), 7/90-6/91, Total Direct Costs=\$20,000
- American Heart Association Established Investigator Award, "Domains of Coagulation and Fibrinolytic Proteins," (S.J.F. Degen, awardee), 7/90-6/95, \$35,000/yr, Total Direct Costs=\$175,000
- American Cancer Society-Ohio Division, "Investigation into the Role that Hepatocyte Growth Factor-Like Protein Plays in Cell Growth," (S.J.F. Degen, P.I.), 7/92-6/93, Total Direct Costs=\$18,000
- American Heart Association, National Grant-in-Aid, "Structure-Function Relationships in Coagulation and Fibrinolytic Proteins," (S.J.F. Degen, P.I.), 7/92-6/95, \$40,000/yr, Total Direct Costs=\$120,000
- NIH (PO1 DC00374), "Subproject IV: Neuronal Subclasses in Olfactory Development," (S.J.F. Degen, P.I. of Subproject IV), 1/93-12/94, Total Cost=\$119,379
- NIH (DK39786), "The Effects of Diabetes on Kidney Proteoglycans," (D. Klein, P.I.), 12/93-11/96, 5% of S.J.F. Degen salary
- NIH (HD30370), "Regulation of Porcine Granulosa Cell FSH Receptor," (A.LaBarbera, P.I.), 12/93-11/96, 5% of S.J.F. Degen salary
- NIH (HL38232), "Human Blood Coagulation and Vitamin K," (S.J.F. Degen, P.I., 30% effort), 9/93-8/96, one year no cost extension 9/96-8/97, Total Direct Costs=\$462,055
- NIH (DK47003), "Liver Regeneration and Growth Factors," (S.J.F. Degen, P.I., 25% effort), 5/94-4/97, Total Direct Costs = \$312,073
- American Heart Association-National, Grant-in-Aid (9650036N), "Prothrombin-deficient Mice—A Model for Structure-Function Studies,"(S.J.F. Degen, P.I., 10% effort), 1/97-12/99, Total Direct Costs=\$165,000 (Returned due to overlap with NIH grant 7/97)
- Mark P. Herschede Medical Research Fund (Equipment Grant) 6/98 - \$1,869
- NIH (HL58103), "Characterization and Use of Prothrombin Deficient Mice," (S.J.F. Degen, P.I., 30% effort), 7/97-6/01 (one year no cost extension 7/01-11/01), Total Direct Costs=\$750,280
- NIH (DK47003), "Liver Regeneration and Growth Factors," (S.J.F. Degen, P.I., 10% effort), 5/97-4/01 (one year no cost extension 5/01-4/02), Total Direct Costs = \$483,477
- NIH (HD30370) "Regulation of Granulosa Cell FSH Receptor," (A. LaBarbera, P.I.; S.J.F. Degen, Co P.I., 10% effort), 4/99-3/02, Total Direct Costs = \$685,970
- NIH (HL57530) "Functional Mapping and Protein Engineering of Thrombin," (L. Leung, P.I.; S.J.F. Degen, Co P.I., 5% effort), 12/98-11/02, Total Direct Costs = \$994,772

NIH (HL58103), "Characterization and Use of Prothrombin Deficient Mice," (S.J.F. Degen, P.I., 25% effort), 12/01-9/04, Total Direct Costs=\$950,000

- Sponsor/Mentor

American Heart Association-Ohio Affiliate, Postdoctoral Fellowship (M.J. Danton, P.I.), S. Degen, Sponsor, 7/90-6/91

Alpha Omega Alpha Student Research Fellowship (D. Stephens, P.I.), S. Degen, Sponsor, 1994

American Heart Association-Ohio Affiliate, Summer Undergraduate Research Fellowship (Ellen Air), S. Degen, Sponsor, Summer 1994

American Heart Association-Ohio Affiliate, Summer Undergraduate Research Fellowship (Antonio Avenido), S. Degen, Sponsor, Summer 1995

American Heart Association-Ohio Affiliate, Summer Undergraduate Research Fellowship (John Eckman), S. Degen, Sponsor, Summer 1996

American Society of Biochemistry and Molecular Biology High School Teacher Fellowship (J. Lewis, P.I.), S. Degen, Sponsor, Summer 1996

NIH (DK09466), "The Biology of Hepatocyte Growth Factor-like Protein," (S. Waltz, P.I.), S. Degen, Sponsor, 7/96-6/97, salary award only

American Heart Association, Ohio Affiliate (SW-96-35-F), "Studies on the Biology of Prothrombin in Prothrombin Deficient Mice," (W. Sun, P.I.), S. Degen, Sponsor, 7/96-6/97, Total Direct Costs=\$30,000

NIH Training Grant (HL07527), "Role of Lipid Transport Proteins in Mammalian Development," (D. Hui, P.I.), Rebecca Muraoka, Graduate student, partial salary support, 10/94-9/97.

NIH Training Grant (HL07382), "Training in Cardiovascular Biology," (A. Schwartz, P.I.), Latonya Clay, Graduate student, partial salary support, 7/96-6/97.

American Heart Association-Ohio Affiliate, Summer Undergraduate Research Fellowship (Meredith Merz), S. Degen, Sponsor, Summer 1997

American Heart Association, Ohio Affiliate (SW-96-35-F), "Studies on the Biology of Prothrombin in Prothrombin Deficient Mice," (W. Sun, P.I.), S. Degen, Sponsor, 7/97-6/99, Total Direct

Costs=\$50,000

NIH (KO8), "Biological Role of Hepatocyte Growth Factor-like Protein," (J. Bezerra, P.I.), S. Degen, Sponsor, 7/95-6/00, Total Direct Costs=\$415,255

NIH Perinatology Training Grant (HD07200), (W. Rice, P.I.), Michael Hughes, Ph.D., Postdoctoral fellow, partial salary support, 1/98-4/00

NIH Developmental and Perinatal Endocrinology Training Grant (HD07465), (S. Handwerger, P.I.), Cynthia Wetzal, Ph.D. Postdoctoral fellow, salary support, 11/99-6/01

American Heart Association-Ohio Valley Affiate Summer Undergraduate Research Fellowship (R. Gorman), S. Degen, Sponsor, Summer 2001.

NIH Regulation of Cellular Growth and Differentiation Training Grant (CA59268), (S. Khan, P.I.), Cynthia Wetzal, Ph.D. Postdoctoral fellow, salary support, 7/01-10/02.

NIH (F32 HD08659) "The biology of Ron/Stk, a receptor tyrosine kinase," (K. Hess, P.I.), S. Degen, Sponsor, 2/00-7/02.

- Training Grants

NIH Training Program in Pediatric Hematology/Oncology (B. Lampkin, P.I.; S. Degen on Training Faculty), 7/89-6/94

NIH Training Grant, "Cardiovascular Diseases of the Young," (F. James, P.I.; S. Degen on Operations Committee and Training Faculty), 7/88-6/93

NIH Training Grant (HL07527), "Lipid Transport and Metabolism in Mammalian Development," (David Hui, P.I.; S. Degen on Training Faculty and Executive Committee), 1988-1998

American Heart Association, Medical Student Research Fellowship Grant, (J. Harmony, P.I.; S. Degen on Selection Committee and participating mentor), 7/89-6/95.

NIH Perinatology Training Grant (HD07200), (W. Rice, P.I.; S. Degen on Training Faculty), 9/89-4/00.

NIH Training Grant (HL07825), "Cardiovascular and Molecular Biology of the Young," (J. Robbins, P.I., S. Degen on Training Faculty), 7/96-6/00

- Intramural

Basic Research Support Grant from Children's Hospital, "Structure-Function Analysis of Coagulation and Fibrinolytic Proteins," (S.J.F. Degen, P.I.), 4/87-3/88, \$15,000

Basic Research Support Grant from Children's Hospital, "Investigation of the Mechanism(s) of Regulation and Tissue-Specific Expression of the Human Prothrombin Gene," (S.J.F. Degen,

P.I.), 4/86-3/87, \$15,000

Basic Research Support Grant from Children's Hospital, "Structure and Function of Serine Proteases Involved in Blood Coagulation," (S.J.F. Degen, P.I.), 7/85-3/86, \$10,000

Trustee Grant for the support of a Postdoctoral Fellow, 11/87-10/90

Trustee Grant for the support of a Postdoctoral Fellow, 1993-1996