CURRICULUM VITAE

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Education

1969	B.A. (Biology), Berea College, Berea, Kentucky
1972	M.S. (Microbiology), University of Tennessee, Knoxville, Tennessee
1977	Ph.D. (Microbiology), University of Tennessee, Knoxville, Tennessee

Academic Appointments

1969-1972	Research Assistant, Department of Microbiology, University of Tennessee
1972-1977	NIH Predoctoral Traineeship, Department of Microbiology, University of Tennessee
1977-1979	Postdoctoral Fellow, Department of Cell Biology, Baylor College of Medicine, Houston, Texas
1979-1980	Instructor, Department of Cell Biology, Baylor College of Medicine, Houston, Texas
1980-1981	Expert, Laboratory of Experimental Pathology, National Cancer Institute, National Institutes of Health, Bethesda, Maryland
1981-1983	Expert, Laboratory of Cellular Carcinogenesis and Tumor Promotion, National Cancer Institute, National Institutes of Health, Bethesda, Maryland
1984-1987	Senior Staff Fellow, Laboratory of Cellular Carcinogenesis and Tumor Promotion, National Cancer Institute, National Institutes of Health, Bethesda, Maryland
1987-1988	Senior Investigator, Laboratory of Cellular Carcinogenesis and Tumor Promotion, National Cancer Institute, National Institutes of Health, Bethesda, Maryland
1988-1991	Associate Professor, Departments of Cell Biology and Dermatology, Baylor College of Medicine, Houston, Texas
1991-2006	Professor, Departments of Molecular and Cellular Biology and Dermatology, Baylor College of Medicine, Houston, Texas
2001-2006	Director, Center for Cutaneous Molecular Biology, Baylor College of Medicine, Houston, Texas
2002-2006	Leader, Cancer Biology Program, Cancer Center, Baylor College of Medicine, Houston, Texas

Academic Appointments (cont)

2007-Present	Professor, Department of Dermatology, University of Colorado, Anschutz Medical Campus, Aurora, CO
2007-Present	Charles C. Gates Chair of Regenerative Medicine and Stem Cell Biology, University of Colorado, Anschutz Medical Campus, Aurora, CO
2007-Present	Director, Charles C. Gates Center for Regenerative Medicine, University of Colorado, Anschutz Medical Campus, Aurora, CO
2014-2017	Director, Charles C. Gates Biomanufacturing Facility, University of Colorado, Anschutz Medical Campus, Aurora, CO

Honors and Scientific Awards

1991	Co-Recipient with Dr. Thomas Krieg, Max Planck Research Award (Alexander von Humboldt Foundation)
1992	Distinguished Guest Lecture Award, European Society for Dermatological Research
1992	William Montagna Lecture Award, Society for Investigative Dermatology
2000	George Odland Lecture Award, Department of Dermatology, Univ. of Washington
2001	Michael E. DeBakey, M.D., Excellence in Research Award, Baylor College of Medicine
2002	CE.R.I.E.S. (CEntre de Recherches et d'Investigations Epidermiques et Sensorielles) Research Award
2003	Tanioku Kihei Memorial Lecture Award, Japanese Society for Investigative Dermatology
2003	Mike Hogg Distinguished Lecture Award, Science Park-Research Division of the University of Texas M.D. Anderson Cancer Center
2005	René Touraine Lecture Award, Fondation René Touraine, Paris, France
2006	Zukowski Family Lecture Award, Human Medical Genetics Program, University of Colorado Health Sciences Center at Fitzsimons
2008	Irvin H. Blank Memorial Lecture, Wellman Center for Photomedicine, Massachusetts General Hospital, Harvard Medical School
2010	Werner K. Stiefel Lectureship, Dermatology Foundation Clinical Symposium
2010	Stephen Rothman Memorial Award, Society for Investigative Dermatology

Professional Organizations

American Association for the Advancement of Science
American Society of Cell Biology
American Society for Microbiology
American Association for Cancer Research
The Society for Investigative Dermatology

Major Committee and Service Responsibilities

1990-1996	Member, Scientific Advisory Board, Dermigen, Inc., Smithville, TX
1991	National Research Plan Task Force, National Institute of Arthritis and Musculoskeletal and Skin Diseases
1993	Scientific Founder, GeneMedicine, Inc., The Woodlands, TX
1993-1997	Member, Clinical and Scientific Advisory Board, GeneMedicine, Inc.

1994-1999	Member, Committee on Scientific Programs, Society for Investigative Dermatology
1995	Vice Chair, Gordon Conference on Epithelial Differentiation and Keratinization
1995	Co-Organizer, Symposium on Molecular Mechanisms in Dermal-Epidermal Interactions, Kloster Irsee, Germany (supported by the Alexander von Humboldt Foundation)
1995	Participant, Workshop on Inherited Disorders of Connective Tissue and Skin, National Institute of Arthritis and Musculoskeletal and Skin Diseases
1996	Co-Organizer, Workshop on Molecular Biology of Skin and Skin Diseases, Instituto Juan March, Center for International Meetings on Biology, Madrid, Spain
1996-2001	Member, Board of Directors, Society for Investigative Dermatology
1996-1999	Member, Medical and Scientific Committee, Dermatology Foundation
1997	Chair, Gordon Conference on Epithelial Differentiation and Keratinization
1998-present	Member, Scientific Advisory Board, Dystrophic Epidermolysis Bullosa Research Association of America
1999	Chair, Committee on Scientific Programs, Society for Investigative Dermatology
2000-2009	Member, Medical and Scientific Advisory Board, Dystrophic Epidermolysis Bullosa Research Association International
2001-present	Member, Medical Advisory Board, American Skin Association
2002	President-Elect, Society for Investigative Dermatology
2003	President, Society for Investigative Dermatology
2004-present	Member, Medical and Scientific Advisory Board, Foundation for Ichthyosis and Related Skin Types
2004-present	Member, Medical and Scientific Advisory Board, International Pachyonychia Congenita Consortium
2007-present	Member, Scientific Advisory Board, Taiga Biotechnologies, Inc.
2012-present	Member, Scientific Advisory Board, Institute for Medical Biology, A*STAR, Singapore
2013	Vice Chair, Gordon Conference on Barrier Function of Mammalian Skin
2015	Co-Chair, Gordon Conference on Barrier Function of Mammalian Skin
2016	Co-Founder of the Epidermolysis Bullosa iPS Cell Consortium

Licensure and Board Certification

N/A

Inventions, Intellectual Property and Patents

05,302,511 "Antibodies to Peptides Unique to Specific Keratin Proteins". Issued 04/12/94.

08/147,777 "Keratin K1 Expression Vectors and Methods of Use". Issued 06/22/99.

08/146,930 "Specific Expression Vectors and Methods of Use". Issued 09/28/99.

62/258,801 "Methods and Compositions for Reprogramming Cells". Provisional Application filed 11/23/2015.

Review and Referee Work

Editorial Boards

1987-present	Molecular Carcinogenesis
1992-2008	Journal of Investigative Dermatology
1992-1997	Molecular and Cellular Differentiation

1993-present	Skin Pharmacology
1996-Present	Experimental Dermatology
1996-Present	Cell and Tissue Research
2004-Present	Stem Cells
2013-2017	Journal of Investigative Dermatology (Associate Editor)

Ad Hoc Reviewer

Cancer Cell
Cancer Research
Cell
Cell Stem Cell
Development
Developmental Biology
Developmental Cell
EMBO J.
Genes and Development
Genesis
Human Gene Therapy
Molecular and Cellular Biology
Molecular Therapy
Nature
Nature Biotechnology
Nature Cell Biology
Nature Genetics
Nature Medicine
Oncogene
PLOS Genetics
PNAS
Science
The Journal of Biological Chemistry
The Journal of Cell Biology
The Journal of Clinical Investigation

Grant Review Committees/Study Sections

1988-present	Special Reviewer: National Cancer Institute, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institute of Child Health and Human Development, National Institute of Diabetes and Digestive and Kidney Diseases
1995-1998	NIH Reserve Reviewer: General Medicine A Study Section.
1998-2002	Advisory Council, National Institute of Arthritis and Musculoskeletal and Skin Disease
2009	ZRG1 MDCN-F (50) Study Section

Ad Hoc Review Panels

German Cancer Research Center
Imperial Cancer Research Fund
The Cancer Research Campaign

Cancer Research UK
Wellcome Trust
The Medical Research Council
The Human Frontier Science Program
Telethon, Italy

Grant Support

Active

W81XWH1810706 Roop (PI) 09/15/2018-09/14/2021
Total Costs: $3,741,911
Translating a Stem Cell-Based Therapy for Epidermolysis Bullosa into the Clinic

The major goal of this proposal is to advance our previously developed induced pluripotent stem cell (iPSC)-based therapy for recessive dystrophic epidermolysis bullosa (RDEB) into the clinic by adapting the production of genetically corrected patient-specific iPSC-derived composite skin grafts under current Good Manufacturing Practice (cGMP)-compliant standards and generating a set of preclinical data for submission of an Investigational New Drug (IND) application.

EB Charities
Roop/Bilousova (PIs) 01/01/2019-12/31/2019
Total Direct Costs: $276,254
Testing a "Spray on Skin" Approach as an Alternative Method for Delivering Keratinocytes and Fibroblasts derived from Gene-edited induced Pluripotent Stem Cells (iPSCs) to Recessive Dystrophic Epidermolysis Bullosa Patients

The major goal of this proposal is to test the feasibility of delivering keratinocytes and fibroblasts differentiated from gene-edited iPSCs to RDEB patients using a "Spray on Skin" delivery system.

EB Charities
Roop/Bilousova (PIs) 01/01/2019-12/31/2019
Total Direct Costs: $281,489
Developing a Therapeutic Approach for Delivering Stem Cells Systemically to Treat Fragile Internal Epithelia in Recessive Dystrophic Epidermolysis Bullosa Patients

The major of this proposal is to develop a new therapeutic strategy that may allow the systemic delivery of genetically corrected iPSC-derived mesenchymal stem cells (MSCs), which will home into and repair injured internal epithelial tissues of RDEB patients.

T32 AR00411-32 Roop (PI) 07/01/2015-06/30/2020 NIH/NIAMS
Total Direct Costs: $1,610,440
Training in Immunodermatology

Major Goals: Training pre-doctoral and post-doctoral students

The overall objective of this program is to prepare trainees for a successful academic career in cutaneous biology research at academic institutions. Our program will train both pre- and post-doctoral fellows (PhD, MD and MD/PhD) to prepare them for successful transitions into independent research funding and eventually independent research careers.

P30 AR057212 Norris (PI) 09/28/2009-07/31/2019 NIH/NIAMS
Total Direct Costs: $2,000,000
Molecular Analysis, Modeling and Correction of Skin Diseases

This is a Skin Diseases Research Core Center grant which provides support for core facilities and pilot projects.
Role: Associate Director

Completed

R01AR059947-05S1 Roop (PI) 09/21/2017-08/31/2018 NIH/NIAMS
Total Direct Costs: $275,826
Testing the Therapeutic Potential of iPS Cells for Inherited Skin Diseases/Supplement

The major goal of this Revision Application for Regenerative Medicine Innovation Projects extends the focus of our parent grant from Epidermolysis Bullosa Simplex (EBS) to include the more severe form of EB, recessive dystrophic EB (RDEB), and to manufacture clinical grade reagents for reprogramming (modified mRNA encoding reprogramming factors) and gene editing (modified mRNA encoding Cas9) in the Gates Biomanufacturing Facility (www.gatesbiomanufacturing.com) which will be provided to members of the EB iPS Cell Consortium at no cost.

R01AR059947-05S1 Roop (PI) 09/21/2017-08/31/2018 EB Charities
Total Direct Costs: $408,485
Testing the Therapeutic Potential of iPS Cells for Inherited Skin Diseases/ Supplement

These are matching funds to the corresponding NIH award described above. Applications funded under RFA-HL-17-029: Revision Applications for Regenerative Medicine Innovation Projects (RMIP) (R01) as part of the 21st Century Cures Act were mandated to have 1:1 matching funds for the total amount of the award. EB Research Partnership, EB Medical Research Foundation, SOHANA Research Fund, collectively referred to as: EB Charities

R01AR059947 Roop/Tolar (PIs) 09/01/2012-08/31/2018 NIH/NIAMS
Total Direct Costs: $1,417,500
Testing the Therapeutic Potential of iPS Cells for Inherited Skin Diseases

The major goal of this proposal is to develop stem-cell based therapies for Epidermolysis Bullosa Simplex (EBS) using autologous induced pluripotent stem cells (iPSC) derived from skin cells

harvested from the same EBS patient. The EBS-iPSC will be genetically corrected and tested to determine their genetic stability.

Epidermolysis Bullosa (EB) Research Partnership and EB Medical Research Foundation
Roop/Bilousova (PIs) 05/01/2017-04/30/2018
iPS Cell Biobank for EB Patients
Total Direct Costs: $83,790

Major Goal: To establish an iPS Cell Biobank for EB patients using our novel RNA-based technology.

Epidermolysis Bullosa (EB) Research Partnership and EB Medical Research Foundation
Roop/Bilousova (PIs) 05/01/2016-04/30/2018
EB iPS Cell Consortium
Total Direct Costs: $543,616

Major Goals: This is a consortium comprised of investigators from the University of Colorado Anschutz Medical Campus, Columbia University Medical Center, and Stanford University School of Medicine who will collaborate in developing an iPS cell-based therapy for Recessive Dystrophic Epidermolysis Bullosa and accelerate this therapy into the clinic.

Dystrophic Epidermolysis Bullosa Research Association (DEBRA) and King Baudouin Foundation
Roop/Bilousova (PIs) 05/01/2016-04/30/2018
Total Direct Costs: $160,500
A Stem Cell-based Therapy for Patients with Epidermolysis Bullosa Simplex

Major Goals: To develop a stem-cell based therapy for Epidermolysis Bullosa Simplex (EBS) patients using genetically corrected induced pluripotent stem cells (iPSC).

R01CA52607 Roop (PI) 08/01/2009-07/31/2016 NIH/NCI
Total Direct Costs: $1,708,319
Targeting Oncogene Expression to Skin in Transgenic Mice

The major goal of this proposal is to dissect the molecular pathways that govern the formation of highly malignant and metastatic NMSCs.

1R01AR060388 Roop (PI) 09/01/2011-06/30/2016 NIH/NIAMS
Total Direct Costs: $1,125,000
The consequences of loricrin deficiency on epidermal barrier function

The major goal of this proposal is to provide insight into a signaling pathway that may provide a safe way to accelerate skin barrier formation in premature infants. In addition, these studies may reveal a novel genetic risk factor for the development of atopic dermatitis.

PR110793 Roop/Tolar (PIs) 09/01/2012-08/31/2015

DOD

Total Direct Costs: $375,000

Stem-cell Based Therapies for Epidemolysis Bullosa

Major Goals: The major goal focuses on generating iPSC from Junctional Epidemolysis Bullosa patients that do not exhibit revertant mosaicism and includes a strategy to correct the genetic defect by zinc finger nuclease-mediated homologous recombination.

DEBRA International Roop (PI) 09/10/2012 – 09/09/2015

Stem Cell-base Therapies for Epidermolysis Bullosa
Total Direct Costs: $621,426

Major Goals: The major goal of this project is to test to therapeutic potential of induced pluripotent stem cells (iPSC) established from JEB patients that develop revertant mosaicism, i.e. patches of skin where the genetic defect is self-corrected, resulting in healthy, non-blistered skin.

FIRST Roop (PI) 09/01/2010 – 08/31/2013

Foundation for Ichthyosis & Related Skin Types
Total Direct Costs: $150,000
Generating immortalized cell lines and iPS cells from EHK patients

Major Goals: The goal of this project is to generate both conditionally immortalized cell lines and iPS cells from EHK patients and to determine if these cells can be genetically corrected in culture and then be used to reconstitute a normal epidermis in an in vivo graft assay.

DEBRA Roop (PI) 07/01/2010 – 06/30/2012

DEBRA Austria
Total Direct Costs: $240,000
Testing the Therapeutic Potential of Induced Pluripotent Stem Cells (iPSC) for Epidermolysis Bullosa Simplex (EBS)

The goal of this project is to generate both conditionally immortalized cell lines and iPS cells from EHK patients and to determine if these cells can be genetically corrected in culture and then be used to reconstitute a normal epidermis in an in vivo graft assay.

R01 AR052263-21 Roop (PI) 09/29/2004 - 05/31/2010

NIH/NIAMS
Total Direct Costs: $1,137,500
Regulation and Function of Keratins in the Epidermis

The major goals of this project are to identify the molecular mechanisms regulating expression of keratin genes and to use transgenic/knockout mouse models to assess their function in the epidermis and its appendages.

U01 CA105491-03 Roop (PI) 09/30/2004-08/31/2010

NIH/NCI
Total Direct Costs: $3,235,790
Inducible Mouse Models for Skin and Head and Neck Cancer

The major goal of this project is the generation of inducible mouse models that closely mimic the development of human skin and head and neck cancers.

N01 AR62228-04 Roop (PI) 09/30/1996-03/31/2002

NIH/NIAMS
Total Direct Costs: $964,642
Development of Experimental Models of Epidermolysis Bullosa Simplex and Testing a Gene Therapy Approach

The major goals of this contract were to make a mouse model that mimics EBS at the genetic level and test a gene therapy approach.

R01 AR40240-09 Roop (PI) 04/01/1996-03/31/2000

NIH/NIAMS
Total Direct Costs: $880,377
Regulation and Function of a Major Cell Envelope Protein

The major goals of this grant were to identify sequences important for tissue, developmental and differentiation-specific expression of the loricrin gene and to delete the loricrin gene from the germline of mice.

ERMS # 00198002 Roop (PI) 09/01/2001 - 08/31/2004

USAMRMC
Total Direct Costs: $478,802

Using a Mouse Model of Epidermolysis Bullosa Simplex to Study Vesicant-induced blistering and Wound Repair

The major goals of this project are to analyze the mechanisms of blister formation, spreading and wound healing in our EBS mouse model and to determine whether the mechanisms involved also play a role in the formation, spreading and healing of sulfur mustard induced blisters.

PC Project Roop (PI) 07/01/2004-06/30/2006

Pachyonychia Congenita Project
Total Direct Costs: $48,500
Generating an Inducible Mouse Model for Pachyonychia Congenita

The major goal of this project is the generation of an inducible mouse model that mimics Pachyonychia Congenita in humans at the genetic and phenotypic levels.

P01 AR47898-05 Roop (Program Director) 09/27/2001-08/31/2007

NIH/NIAMS
Total Direct Costs: $5,058,152
Molecular Mechanisms of Skin and Appendage Development (Program Project Grant)

The major goals of this program project grant are to identify genetic events that occur in a spatio-temporally controlled manner during skin and appendage development.

R01 AR50252-04 Roop (PI) 07/07/2003-05/31/2008

NIH/NIAMS
Total Direct Costs: $1,175,000
Testing Gene Therapy for Epidermolysis Bullosa Simplex

The major goal of this grant is to test gene therapy approaches for epidermolysis bullosa simplex using a genetically engineered mouse model that mimics the human disease.

F.I.R.S.T. Research Grant Roop (PI) 01/01/2007-12/31/2007

Foundation for Ichthyosis & Related Skin Types
Total Direct Costs: $75,000
Testing Therapeutic Approaches for Epidermolytic Hyperkeratosis Using a Preclinical Mouse Model.

The major goal of this project is to use a genetically engineered mouse model which mimics EHK to test novel strategies to suppress or correct the expression of one of the mutant genes which causes EHK.

Bibliography

Peer-Reviewed

1 Roop, D.R., Mundt, J.O., and Riggsby, W.S. (1974) Deoxyribonucleic acid hybridization studies among some strains of group D and group N streptococci. International Journal of Systematic Bacteriology 24:330-337.

2 Roop, D.R., and Riggsby, W.S. (1978) Choice of labeled precursors in synthesis of DNA for molecular hybridization. Biochemical and Biophysical Research Communications 84:764-771.

3 Roop, D.R., Nordstrom, J.L., Tsai, S.Y., Tsai, M.-J., and O'Malley, B.W. (1978) Transcription of structural and intervening sequences in the ovalbumin gene and identification of potential ovalbumin mRNA precursors. Cell 15:671-685.

4 Tsai, S.Y., Roop, D.R., Tsai, M.-J., Stein, J.P., Means, A.R., and O'Malley, B.W. (1978) Effect of estrogen on gene expression in the chick oviduct. Regulation of the ovomucoid gene. Biochemistry 17:5773-5780.

5 Nordstrom, J.L., Roop, D.R., Tsai, M.-J., and O'Malley, B.W. (1979) Identification of potential ovomucoid mRNA precursors in chick oviduct nuclei. Nature 278:328-331.

6 Roop, D.R., Tsai, M.-J., and O'Malley, B.W. (1980) Definition of the 5' and 3' ends of transcripts of the ovalbumin gene. Cell 19:63-68.

7 Tsai, S.Y., Roop, D.R., Stumph, W.E., Tsai, M.-J., and O'Malley, B.W. (1980) Evidence that DNA sequences flanking the ovalbumin gene are not transcribed. Biochemistry 19:1755-1761.

8 Roop, D.R., Kristo, P., Stumph, W.E., Tsai, M.-J., and O'Malley, B.W. (1981) Structure and expression of a chicken gene coding for U1 RNA. Cell 23:671-680.

9 Lai, E.C., Roop, D.R., Tsai, M.-J., Woo, S.L.C., and O'Malley, B.W. (1982) Heterogeneous initiation sites for transcription of the chicken ovomucoid gene. Nucleic Acid Research 10:5553-5567.

10 Roop, D.R., Hawley-Nelson, P., Cheng, C.K., and Yuspa, S.H. (1983) Keratin gene expression in mouse epidermis and cultured epidermal cells. Proc. Natl. Acad. Sci. USA 80:716-720.

11 Steinert, P.M., Rice, R.H., Roop, D.R., Trus, B.L., and Steven, A.C. (1983) Complete amino acid sequence of a mouse epidermal keratin subunit: implications for the structure of intermediate filaments. Nature 302:794-800.

12 Roop, D.R., Cheng, C.K., Titterington, L., Meyers, C.A., Stanley, J.R., Steinert, P.M., and Yuspa, S.H. (1984) Synthetic peptides corresponding to keratin subunits elicit highly specific antibodies. J. Biol. Chem. 259:8037-8040.

13 Steinert, P.M., Parry, D.A.D., Racoosin, E.L., Idler, W.W., Steven, A.C., Trus, B.L., and Roop, D.R. (1984) The complete cDNA and deduced amino acid sequence of a type II mouse epidermal keratin of 60,000 Da: analysis of sequence differences between type I and type II keratins. Proc. Natl. Acad. Sci. USA 81:5709-5713.

14 Johnson, L.D., Idler, W.W., Zhou, X.-M., Roop, D.R., and Steinert, P.M. (1985) Structure of a gene for the human epidermal keratin of 67,000 molecular weight. Proc. Natl. Acad. Sci. USA 82:1896-1900.

15 Toftgard, R., Roop, D.R., and Yuspa, S.H. (1985) Proto-oncogene expression during two-stage carcinogenesis in mouse skin. Carcinogenesis 6:655-657.

16 Krieg, T.M., Schafer, M.P., Cheng, C.K., Filpula, D., Flaherty, P., Steinert, P.M., and Roop, D.R. (1985) Organization of a type I keratin gene: evidence for evolution of intermediate filaments from a common ancestral gene. J. Biol. Chem. 260:5867-5870.

17 Steinert, P.M., Parry, D.A.D., Idler, W.W., Johnson, L.J., Steven, A.C., and Roop, D.R. (1985) Amino acid sequences of mouse and human epidermal Type I keratins of Mr 67,000 provide a systematic basis for the structural and functional diversity of the end domains of keratin intermediate filament subunits. J. Biol. Chem. 260, 7142-7149.

18 Steinert, P.M., Steven, A.C., and Roop, D.R. (1985) The molecular biology of intermediate filaments. Cell 42:411-419.

19 Toftgard, R., Yuspa, S.H., and Roop, D.R. (1985) Keratin gene expression in mouse skin tumors and in mouse skin treated with TPA. Cancer Research 45:5845-5850.

20 De Luca, L.M., Roop, D.R., and Huang, F.L. (1985) Vitamin A: A key nutrient for the maintenance of epithelial differentiation. Acta Vitaminol. Enzymol. 7:13-20.

21 Huang, F.L., Roop, D.R., and De Luca, L.M. (1986) Vitamin A deficiency and keratin biosynthesis in cultured hamster trachea. In Vitro 22:223-230.

22 Harper, J.R., Roop, D.R., and Yuspa, S.H. (1986) Transfection of the EJ rasHa gene into keratinocytes derived from carcinogen-induced mouse papillomas causes malignant progression. Mol. Cell. Biol. 6:3144-3149.

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24 Roop, D.R., Lowy, D.R., Tambourin, P.E., Strickland, J., Harper, J.R., Balaschak, M., Spangler, E.F., and Yuspa, S.H. (1986) An activated Harvey ras oncogene produces benign tumors on mouse epidermis. Nature 323:822-824.

25 Rogers, G., Martinet, N., Steinert, P., Wynn, P., Roop, D.R., Kilkenny, A., Morgan, D., and Yuspa, S.H. (1987) Cultivation of murine hair follicles as functionally intact organoids in collagen matrix culture. J. Invest. Dermatol. 89:369-379.

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28 Fisher, C., Jones, A., and Roop, D.R. (1987) Abnormal expression and processing of keratins in pf/pf and Er/Er mutant mice. J. Cell Biology 105:1807-1820.

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30 Ansel, J.C., Luger, T.A., Lowy, D., Perry, P., Roop, D.R., and Mountz, J.D. (1987) The expression and modulation of IL-1 in murine keratinocytes. J. Immunol. 140:2274-2278.

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35 Nischt, R., Roop, D.R., Mehrel, T., Yuspa, S.H., Rentrop, M., Winter, H., and Schweizer, J. (1988) Aberrant expression during two stage mouse skin carcinogenesis of a type I 47 kd keratin, k13, normally associated with terminal differentiation of internal stratified epithelia. Molecular Carcinogenesis 1:96-108.

36 Stanley, J.R., Mueller, S., Klaus-Kovtun, V., and Roop, D. (1988) Isolation of complementary DNA for bullous pemphigoid antigen by use of patients' autoantibodies. J. Clin. Invest. 82:1864-1870.

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