Robert A. Kirken, Ph.D.

DEAN, COLLEGE OF SCIENCE &
PROFESSOR, DEPARTMENT OF
BIOLOGICAL SCIENCES
THE UNIVERSITY OF TEXAS AT EL PASO

Education

Undergraduate

1982-1986 B.A. with honors, *cum laude*, (Chemistry); Olivet College, Olivet, MI

Graduate

1986-1991 Ph.D. (Biomedical Sciences); Wright State University, Dayton, OH

Postgraduate Training

1992-1996 National Institutes of Health/National Cancer Institute (NIH/NCI)
Cytokine Molecular Mechanisms Section, Frederick, MD
Postdoctoral Fellow, Intramural Research Training Assistantship (IRTA)
Sponsor: William L. Farrar, Ph.D., Head

Current Administrative Experience

Dean, College of Science, The University of Texas at El Paso

Duties:

- Oversee and direct operations and planning for the College of Science that includes the Departments of Biological Sciences, Chemistry, Geological Sciences, Mathematical Sciences, and Physics, along with programs in Bioinformatics and Computational Science consisting of 120+ tenured or tenure-track faculty, 50+ lecturers, and 150+ staff.
- Responsibility and oversight for an annual operating base budget of $20 million and an additional $20+ million in annual research expenditures.
- Oversee administration of graduate and undergraduate degree programs hosted by the College, including 1 B.A. degree, 31 B.S. degrees, 22 Fast Track programs, one Undergraduate Certificate, 11 M.S. degrees and 5 Ph.D. degrees. For descriptions of each of these degrees, please see http://www.science.utep.edu/index.php/degree-plan.
- As a service College help meet the core requirement needs of more than 25,000 students.
- Oversee College facilities, including 5 buildings dedicated for teaching and research needs that house state-of-the-art vivarium and BSL-3 facilities as well as cutting-edge technology in NMR/spectroscopy, imaging, and diverse capabilities for the assessment and analysis of a vast array of materials.
- Collaborate with a team of Associate Deans to support and evaluate research efforts and initiatives, promote student engagement, success and career preparation, curriculum development/revision and implementation, and faculty mentoring and development.

- Engage with the College of Science Advisory Board comprised of alums that consist of regional and national leaders of academia, industry, and government sectors to support our philanthropic efforts to enhance student opportunities and program initiatives.
- Oversee and lead the Pre-Health Professions Program that advises all students on campus who plan to apply to medical, pharmacy, dental, veterinary and other professional and medical programs.

Accomplishments:

- Increased the number of majors in the College over multiple consecutive years; we now serve more than 3200 undergraduate majors (+31%) and 400 graduate students (+18%).
- Increased awarded degree with UG (+33%) Grad (+22%) now exceeding 500 students per year for an increase of 31% overall.
- As a service college increased SCH to all-time record highs of greater than 130,000 or 20% increase over a six-year period.
- Shortened time to graduation for undergraduates in the College to less than 5 years.
- Built a student success advising center that streamlined on-line registration, student tracking, and information release which lead to outcomes over a two-year period to reduces students on probation and suspension by 62%.
- Expanded research infrastructure and capacity as Principal Investigator and architect of the NIH-sponsored Border Biomedical Research Center funded at >$19 million through 2024.
- Increased overall College annual research funding expenditures of more than $20 million representing a greater than 50% increase since 2014.
- Cultivated new and existing donor support, sought and promoted development activities, fostered alumni relations, created and implemented new strategies for outreach including the first College e-newsletter and the use of social media and other technologies.
- Developed an active and highly engaged external advisory board to assist with fund raising and promoting our vision helping the college to exceed $10m during my tenure that includes individual million-dollar donors.
- Implemented strategic planning and goal setting initiatives for the College to build faculty consensus, develop and commercialize intellectual property, and expand fund raising opportunities.
- Synthesized and streamlined College policies, procedures and best operating practices.
- Successfully guided the College through accreditation (Southern Association of Colleges and Schools Commission on Colleges) for 2016.
- Built a Business Center to handle the many transactions, appointments and budgets for the College and initiate training workshops for staff.
- According to Diverse Magazine, we now rank 3rd in the United States in the number of bachelor's degrees awarded to Hispanics in Biological and Biomedical Sciences, 3rd in the Physical Sciences and 1st in awarding Master's degrees in Math and Statistics

Academic Planning and Student Success Initiatives

- Developed diverse and innovative new programs and research opportunities for students.

- Created the College Office for Readiness and Engagement to support the explosive growth within the College and provide mentoring and professional development for students along with curricular advising.
- Created Townhall meetings where all colleges are invited to provide graduate degree options to College of Science majors
- Restructured the Medical Professions Institute, developed a post-baccalaureate pre-medical certificate, and created a strong external advisory board of stakeholders to assist in oversight. Expanded health professions programs and advising in conjunction with the Schools of Nursing and Pharmacy to facilitate student success.
- Creating a new center to support student internships, off-campus research opportunities, and other activities for professional development.
- Developed new program offerings to increase University opportunities for students:
    - B.S. Ecology and Evolutionary Biology degree
    - B.S. in Neuroscience shared with College of Liberal Arts
    - Professional Master's Degree that employs certificates from all colleges
    - Ph.D. in Data Science

Previous Administrative Experience

Department Chair, Biological Sciences, The University of Texas at El Paso
Duties:

- Oversee operations and planning for the Biological Sciences Department that is home to a large number of students and faculty with diverse interests. The complex environment of this department involved strategic planning to meet the need for courses and laboratory sections while maintaining high-end research labs and equipment and supporting faculty engaged in research ranging from molecular immunology to climate change.
- Responsibility and oversight for an annual operating budget of $2.5 million and an additional $10 million in annual research expenditures. The Department's budget accounts for 60% of the overall College of Science budget at the University.
- Provide leadership, mentorship and supervision for departmental faculty, comprised of 32 professors with an additional 12 faculty on research or lecture tracks, as well as the entire 100+ departmental employees. Hired one-third of these faculty members while Chair.
- Oversee administration of Biological Sciences graduate and undergraduate degrees, to include 3 B.S., 2 Ph.D., and 1 M.S. degree. The Department serves nearly 1,500 majors and in a typical semester enrolls approximately 3,500 students in about 50 courses.
- Oversee Department facilities, to include some 148,000 sq. ft. of teaching and research spaces that span multiple buildings, a vivarium, and a BSL-3 laboratory. Laboratories contain state-of-the-art equipment for both research and teaching, and the instructional program makes extensive use of facilities available only for research at most comparably-sized or larger universities.
- Helped to oversee and develop the new Biosciences Research Building (2009) which now houses the majority of the department and BBRC core facilities.
- Supervise and administer multiple National Science Foundation (NSF) and National Institutes of Health (NIH) training grants for the Department.

Accomplishments

- Increased number of biology majors almost three-fold to ~1500 students.
- Increased number of graduate students at the M.S. and Ph.D. level to almost 100.
- Program Director and architect of the NIH-sponsored Border Biomedical Research Center; funded at nearly $13 million over 5 years.
- Instrumental in design, implementation, and oversight of new 140,000 sq. ft. Bioscience Research Building and renovation of our 100,000 sq. ft. Biology Building.
- Department consistently generated greater than $10 m in annual research expenditures.

Academic Planning

- Developed new program offerings to increase University opportunities for students:
  - Biological Sciences degrees at the B.S., M.S. and Ph.D. level
  - B.A. in Biological Sciences (revised and updated);
  - B.S. in Cellular and Molecular Biochemistry;
  - B.S. in Neuroscience (currently proposed); and
  - Ph.D. in Ecology and Evolutionary Biology.
- Encourage student and faculty participation in unique local research opportunities. The University's location in the northern part of the Chihuahuan Desert and the Rio Grande Valley provides a fascinating setting for learning in habitats ranging from desert to alpine mountain ranges. The El Paso-Ciudad Juárez metroplex has a population of nearly 2 million people, presenting environmental challenges and public health problems characteristic of both industrialized and developing societies. The majority of research programs in the Department are focused on biomedical and environmental problems of the region.

Student Success Initiatives

- Strong recruiting and retention of Hispanic students; currently ranked 2nd in the Nation in graduating Hispanic Biology majors.
- Facilitated effective advising and reduced time to degree.
- Enhanced undergraduate research opportunities.

Academic Appointments

2013-present **Dean College of Science**
University of Texas at El Paso
Chemistry Computer Science Building Suite 3.0218
500 W. University Ave.
El Paso, TX 79968

2005-2013 **Professor and Chair**
University of Texas at El Paso
Department of Biological Sciences
500 W. University Ave., Biosciences Bldg. 2.120

El Paso, TX 79968

2004-2005 **Associate Professor**
University of Texas at Houston Medical School
Department of Integrative Biology and Pharmacology
6431 Fannin St., MSB 4.218
Houston, TX 77030

2005-2007 **Visiting Professor**
University of Texas at Houston Medical School
Department of Integrative Biology and Pharmacology
6431 Fannin St., MSB
Houston, TX 77030

2002-2005 **Adjunct Asst. Professor**
University of Texas: M.D. Anderson Cancer Center
Department of Bio-immunotherapy
1515 Holcombe Blvd.
Houston, TX 77030

2001-2005 **Adjunct Professor**
UT-Houston Medical School
Department of Surgery-Organ Transplantation
6431 Fannin St., MSB 6.240
Houston, TX 77030

1998-2005 **Assistant Professor**
University of Texas at Houston Medical School
Department of Integrative Biology and Pharmacology
6431 Fannin St., MSB 4.218
Houston, TX 77030

1996-1998 **Staff Scientist**
Intramural Research Support Program, (IRSP), Science Applications International Corporation (SAIC) Scientist, National Cancer Institute (NCI), Frederick Cancer Research and Development Center (FCRDC), Frederick, MD 21702

Professional Organizations / Committees

National

1987-1991 Biophysical Society Member
1995-present International Cytokine Society
1999-present Transplantation Society
2000-2005 American Association of Immunologists

2000-2005 American Society of Transplant Surgeons
2007-present American Biochemistry and Molecular Biology
1998-present American Association of Immunologists

Patents

- Provisional patent (Filed 2002)
  University of Texas-Houston: Novel Jak3 inhibitor with immunosuppressive potential.
  Registration No. 38,561, Docket No. 2105-00400.

- Submitted and amended Full Patent "Methods for Selectively Inhibiting Janus tyrosine kinase 3 (Jak3) December 10, 2003. Inventors, Drs. Kirken, Kahan, Stepkowski and Priebe-UTH.

- Patent Issued: US 7,365,096. Methods for selectively inhibiting Janus tyrosine kinase 3 (Jak3) 2008

- 2009 Filed Provisional Patent U.S. Patent Application
  Title: Biosensor to Detect Infectious Agents
  Serial No.: 12/573,100
  Filing Date: October 3, 2009
  Our File No.: UTEP: 1001
  Inventors: Drs. Kirken, Wicker, Gosselink and MacDonald.

- 2010 Filed to convert to full Patent U.S. Patent Application
  Title: Biosensor to Detect Infectious Agents
  Serial No.: 12/573,100
  Filing Date: October 3, 2009
  Our File No.: UTEP: 1001
  Inventors: Drs. Kirken, Wicker, Gosselink and MacDonald.

- CTLA-4 blockade with metronomic chemotherapy for the treatment of breast cancer Licensed - Active Prosecution 4/2/2014 61/973,908 Provisional United States 4/2/2014
- CTLA-4 blockade with metronomic chemotherapy for the treatment of breast cancer Licensed - Active Prosecution 4/2/2014 14/676,855 U.S. Non-Provisional United States 4/2/2015
- CTLA-4 blockade with metronomic chemotherapy for the treatment of breast cancer Licensed - Active Prosecution 4/2/2014 PCT/US2015/02396 Initial PCT Not Applicable (PCT App) 4/2/2015
- CTLA-4 blockade with metronomic chemotherapy for the treatment of breast cancer Licensed - Active Prosecution 4/2/2014 2015/028,3237 U.S. Non-Provisional United States 4/2/2015
- Anti-CTLA4 Blockade Licensed 4/27/2015 62/161,116 Provisional United States 5/13/2015

Database Entries from Research
1998 Genebank accession number: AF041336

1999	Protein Research Foundation accession number: 2503639d
2004	PhosphositePlus and **UniProtKB/Swiss-Prot entry** for Stat6 Serine 756 and Threonine 645
2008	PhosphositePlus and **UniProtKB/Swiss-Prot entry** for human Prohibitin 2 at Serine 243 and Tyrosine 248
2008	PhosphositePlus and **UniProtKB/Swiss-Prot entry f**or human Jak3 at tyrosine 904 and 939

Honors and Awards

1982 - 1986	Presidential Scholar Award: Academic Excellence, Olivet College
1984 - 1986	Student Senate Representative, Olivet College
1985	American Chemical Society President, Olivet College Chapter
1986	Commencement Ceremony Speaker, Olivet College
1986	American Institute of Chemists Student Research Award, Olivet College
1987	Sigma Xi Graduate Student Research Lecture Award, Wright State University
1992 - 1996	Intramural Research Training Assistantship Award (IRTA), National Institutes of Health (NIH)
1999	Young Investigator Travel Award: American Soc. Transplant Surgeons
2003 - 2004	Promoted to Associate Professor
2003-2004	UT Houston Health Science Center Dean's Teaching Excellence Award
2005	Promoted to Full Professor within UT System
2006 - 2007	UTEP Office of Research and Sponsored Programs Award for Outstanding Performance in Securing Extramural Funding
2007 - 2008	UTEP Office of Research and Sponsored Programs Award for Outstanding Performance in Securing Extramural Funding
2008 - 2009	UTEP Office of Research and Sponsored Project Award for Outstanding Leadership and Mentoring Faculty
2009 - 2010	UTEP Office of Research and Sponsored Projects Award for Outstanding Performance in Securing Extramural Funding and Faculty Mentoring
2010 - 2011	UTEP Office of Research and Sponsored Projects Award for Outstanding Performance in Securing Extramural Funding
2011	UTEP College of Science Faculty Marshal
2012	UTEP Office of Research and Sponsored Projects Award for Outstanding Performance
2013	UTEP Office of Research and Sponsored Projects for Outstanding Performance in Securing Extramural Funding
2012-18	UTEP Office of Research and Sponsored Projects: One Million Dollar Research Club for outstanding competitive research accomplishment of greater than $1m annually

Grant Reviewer Positions

2004 - 2006	Gulf coast GI Pilot Grant Award Project at UTHSC
2004 - 2005	New Investigator Grant Program at UTHSC

2004 - 2005	Mentor of Huan Lu UT-Dental Branch NIH grant entitled "Opalescence of Dental Resin Composite".
2004 - 2005	Co-Mentor Hesham Amin MD Anderson Cancer Center– NIH KO-8 Training Grant.
2005	NIH-NIDDK
2007	NIH NIDDK
2008	Association for International Cancer Research
2009	FWF Austrian Science Fund
2009	Association for International Cancer Research
2009	Texas Tech University Research Grants
2011	FWF Austrian Science Fund
2011	RCMI Research Translational NIH pilot grants
2012	RCMI Research Translational NIH pilot grants
2013-present	Various domestic and international agencies

Editorial Positions

2000-2003 Assistant Editor, *News in Physiological Sciences* (NIPS)

Adhoc Reviewer:

Circulation Journal
Current Cancer Drug Targets
Cytokine
European Cytokine Network
Journal of Biological Chemistry
Journal of Immunology
Journal of Leukocyte Biology
Molecular Endocrinology
Transplantation
Clinical Experimental Immunology
Transplantation Proceedings
News in Physiological Sciences (NIPS)
Oncogene
Springer Publishing, Biosciences Microbiology and Immunology
Canadian Journal of Chemistry
Leukemia Research
American Journal of Pathology
Expert Review of Clinical Immunology
FEBS Letters
Clinical and Experimental Immunology

Toxins
PLOS One
Biochemical Journal
More than 10 additional journals

Service on the University of Texas-Houston Health Science Center Committees

1999-2000	Strategic Planning for the Research Enterprise; headed by Dean Buja. Selected by the Dean of the Medical School to develop a strategic plan for moving The college forward in research and medical education
2001-2002	UT-Dental Branch Pharmacology Faculty Search Committee Member. Assisted in hiring outstanding faculty to promote the mission of the dental school
2001-2003	Member of Institutional Research Council Committee headed by George Stancel. Developed new strategies to move research forward within the greater Houston area
2003-2004	Member of New Investigator Grant Development Steering Committee Developed new mechanisms to mentor and promote successful Grantsmanship for junior faculty
2004-2005	New Investigator Grant Development Program Committee member and Mentor headed by P.J. Davies Provided oversight and mentoring of new faculty to increase grant success rates
2004-2005	Member of the Gulf Coast Consortium for Chemical Genomics Oversight Committee Provided leadership and oversight on developing chemical libraries and assays
2004-2005	Member of Intellectual Property Committee Evaluated intellectual property developed by the university
2004-2005	New Investigator Grant Development Program Committee member and Mentor headed by P.J. Davies Provided oversight and mentoring of new faculty to increase grant success rates
2004-2005	Member of the Gulf Coast Consortium for Chemical Genomics Oversight Committee Provided leadership and oversight on developing chemical libraries and assays
2004-2005	Member of Intellectual Property Committee Evaluated intellectual property developed by the university

Service on the University of Texas-Houston Medical School Committees

1999-2002	Faculty Senate
1999-2005	Member of the Cell and Regulatory Biology Steering Committee (CRB)
1999-2005	Cell and Regulatory Biology (CRB) Graduate Student Search
1998-2001	Department of Integrative Biology and Pharmacology Faculty Search
1999-2001	Department of Integrative Biology and Pharmacology Graduate Education Committee
1999-2002	Chair and Co-chair of Department of Integrative Biology and Pharmacology Seminar Series
2001	Faculty Interviewer for Medical School Applicants

2001-2002	Five Year Department of Integrative Biology and Pharmacology Review-Training Committee
2002-2003	Renal Transplant Candidate Search and Interview headed by Dr. Bruce Kone
2003-2004	Dean's Excellence Teaching Award

Service on Local and National Committees

2006-2007	Reviewer for the National Institutes of Health-NIDDK
2008-present	RCMI-Translational Network Core Lab Subcommittee Chair Provide leadership to research cores that span 18 minority institutions
2009-present	Supported the Regional Economic Development Corporation group, El Paso Supported efforts to entice and recruit companies to the El Paso region
2009-present	Director of the Core Research Laboratories for 18 Research Centers at Minority Institutions belonging to the Research Translational Network
2011	Steering Committee Member Appointed by University of Texas System Chancellor Dr. Francisco Cigarroa for 2010 UT System Technology Commercialization Symposium January 17 & 18, 2011. Developed new strategies to enhance intellectual property development and commercialization of UT System inventions
2011-present	RTRN Steering Committee Vice Chair Elect

Service on University of Texas Health Science Center (UTHSC) Graduate School Committees and Awards

1999-2005	Graduate School and Biomedical Sciences Student Recruitment
1999-2004	Graduate School and Biomedical Sciences Admission Committee
2003-2004	CHAIR, Graduate School and Biomedical Sciences Admission Committee
2003	GSBS Dean's Excellence Award Recipient
2004	Attended GSBS Graduation
2005	Member of Internal Reviewer of the Genes & Development Program within GSBS
2005	Chaired GSBS Exam Committee for Rebecca Corrigan
2005	Member of GSBS-UTHSC Pharmacoinformatics Training Grant Committee
2007-2008	Graduate School and Biomedical Sciences Student Recruitment

Directed Graduate School Rotational Students

1998	Qi Shen	2012	Alejandro Bugarini
1999	Fariba Behbod	2012	Alejandra Saenz
2000	Josh Vincentz	2012	Damaris Rosado
2002	Jeremy Ross	2012	George Martinez
2002	Morgan McKeller	2012	Blanca Ruiz
2003	Hanyin Cheng	2012	Mayra Canales
2003	Brett Ewald	2012	Cristina Arenaz
2004	Nancy Seibert	2012	Derrick Oaxaca
2004	Georgialina Rodriguez	2013-present	more than 5
2005	Famourou Kourouma		
2005	Abhishek Mitra		
2007	Laura Torres		
2009	Mathew Gaynor		
2009	Jason Meyer		
2010	Blanca Ruiz		
2011	G. Steven Martinez		

Graduate Student Thesis and Exam Committee Member

1998-2003	Served on Ph.D. thesis and Exam committee for Qi Shen in Department of Integrative Biology and Pharmacology; successfully defended 2003
1998-2001	Served as thesis advisor for Fariba Behbod in the Department of Integrative Biology and Pharmacology; successfully defended 2001.
1999-2000	Served on Ph.D. thesis committee for Cheryl Komanduri in Department of Neurology
1999-2001	Served on Ph.D. thesis committee for Barton W. Trawick in Department of Surgery-Organ Transplantation; successfully defended 2001
1999-2001	Served on Ph.D. thesis committee for Christopher Carlson in Department of Integrative Biology and Pharmacology; successfully defended 2001
1999-2001	Served on Ph.D. thesis committee for Ginny Graham in Department of Integrative Biology and Pharmacology; successfully defended 2002
2000-2004	Served on Ph.D. thesis committee for John Langowski in M.D. Anderson Cancer Center
2000-2002	Served on M.Sci. thesis committee for Alan Zarrinneshan in Department of Integrative Biology and Pharmacology; successfully defended 2002
2000-2001	Served on Ph.D. thesis committee for Jennifer Carter in M.D. Anderson Cancer Center
2001-2003	Served on M.Sci. thesis committee for Roger Belizaire in Department of Neurology; successfully defended 2003
2001-2004	Served on Ph.D. thesis and exam committee for Zhiyong Ren in M.D. Anderson Cancer Center
2002-2004	Served on Ph.D. thesis committee for Morgan McKeller in M.D. Anderson Cancer Center
2002-2005	Served on Ph.D. thesis committee for Janci Chunn in Department of

	Biochemistry, University of Texas-Houston Medical School
2002-2004	Served on Ph.D. thesis committee for Melissa Adams in Department of Biochemistry, University of Texas-Houston Medical School
2002-2005	Served on Ph.D. thesis committee for Xiaochong Wu in Department of Integrative Biology and Pharmacology, University of Texas-Houston Medical School
2003-2005	Served on Ph.D. thesis committee for Ben Mull, M.D.Anderson Cancer Center
2003-2007	Served as Ph.D. advisor for Hanyin Cheng in Department of Integrative Biology and Pharmacology, University of Texas-Houston Medical School
2003-2007	Served as Ph.D. advisor for Jeremy Ross in Department of Integrative Biology and Pharmacology, University of Texas-Houston Medical School
2004-2005	Served on Ph.D. thesis committee for Rebecca Corrigan, Department of Biochemistry and Molecular Biology
2004-2009	Served as Ph.D. advisor for Georgialina Rodriguez in Department of Integrative Biology and Pharmacology, University of Texas-Houston Medical School
2004	Chaired Candidacy Exam for Rebecca Corrigan
2004-2005	Served as M.Sci thesis committee member for Brett Ewald, M.D Anderson Cancer Center
2004-2005	Served on Ph.D. thesis committee of Cherie Roche, Department of Pathology, University of Texas-Houston Medical School
2005	Served on Ph.D. thesis committee for Adrienne McCampbell, Department of Integrative Biology and Pharmacology, University of Texas-Houston Medical School
2005	Served on Ph.D. thesis committee for Svitlana Kurinna, Institute of Molecular Medicine
2006-2008	Served on Ph.D. thesis committee for Zaineb Al-Dahwi, UTEP
2006	Served on Ph.D. thesis committee for Patricia Garrido, UTEP
2005-2007	Served on Ph.D. thesis committee for Juan Hernandez, UTEP
2007-2008	Served as thesis committee member for Laura Torres, UTEP Biological Sciences
2009-2010	Serve as PhD thesis committee member for Johanny Meneses, UTEP Biological Sciences
2010-2015	Served as Ph.D. thesis committee mem. for Chuck Gilbert, UTEP Biological Sciences
2010-2012	Served as mentor for Damaris Rosado who graduated with MS in 2012

Student Sponsorships

Graduated Ph.D. Students as Major Professor

2001	Fariba Behbod
2003	Zsuzsana Nagy
2007	Hanyin Cheng
2007	Jeremy Ross
2009	Georgialina Rodriguez
2010	Abhisek Mitra
2014	Blanca Ruiz
2015	G. Steven Martinez

2017 Elisa Robles

Current Ph.D. Candidates

2016-present Alice Hernandez
2014-present Yoshira Ayala

Graduated M.S. Candidates

2012 Damaris Rosado
2014 Derrick Oaxaca
2015 Stephanie Moreno

Undergraduate Students

1998 Ardavan Behbod
1999 Ana Petkovska
2000 Cindy Herrick
2002 Qian Wu
2006 Gabriela Federico, Valentina Montoya
2007 Jessica Hernandez,
2007 Omar Khateeb
2007-2007 Damaris Rosado
2005-2007 Elizabeth Salazar,
2007 Blanca Soria
2009 Hadit Morales
2009 Juan Bacerra
2009 Justine Murray
2009 John Wilson
2010 Gloria Herrera
2010 Jennifer Stalter
2010 Rafael Torres
2010 Adriana Saldivar
2011 Derrick Oaxaca
2011-Current More than 15 students

Postdoctoral Fellows

2001-2004 Yuling Wang
2003-2010 Zsuzsanna Nagy
2007-2014 Jeremy Ross
2009-2015 Georgialina Rodriguez
2014-2018 Blanca Ruiz
2015-2016 G. steven Martinez
2014-present Armando Estrada
2017-present Elisa Robles

Technicians

1997-2000	Rebecca A. Erwin-Cohen
2001-2005	Judy Kao
2006	Cynthia Perez
2007-2008	Christina Gutierrez
2009-2010	Stephen Martinez
2012-2013	Elsa Warden
2013-present	Five revolving technicians

Teaching Responsibilities

1998	Seminars in Regulatory Biology, GS040751, (6 hrs.)
1999-2005	Mechanisms of Hormone Action, GS130024, (6 hrs.)
1999	Topics in Molecular Medicine, GS2106111100, (1 month)
1999-2005	Cell Biology Course number GS040013100, (4 hrs.)
1999-2005	Medical Pharmacology Course-Section IV, Toxicology II, (1 hr.)
2000-2005	Medical Pharmacology Course-Section III, Antimicrobial Chemo., (2 hrs.)
1999-2005	Summer Students Research Program Lecturer
2006-2013	Senior Seminar course Biol 4192
2008-2013	Lectures in Structure and Function of Macromolecules Biol 5340
2008-2013	Lectures in Advanced Immunological Concepts Biol 5326

Current Grant Support

1. Research Center at Minority Institutions and Borders Biomedical Research Center. NIH grant (PI R.A. Kirken). U54 MD007592. 03/1/2019 to 02/28/2024. $19.2m

Past Grant Support

2. "Effects of Prodigiosin on JAK3", P.I: B.D. Kahan, Co-P.I.: Kirken, R.A., Pharmacia & Upjohn. 07/01/99-06/30/00, $25,000.
3. "Stat6 as a target to treat airway hyperresponsiveness", P.I.: R.A. Kirken, American Lung Association, 07/01/00-06/30/03, $105,000.
4. "Jak Stat pathways as cancer therapeutic targets", P.I.: M. Talpaz, Co-Investigator: R.A. Kirken, M.D. Anderson Multidisciplinary Research Program, 07/01/01-06/31/03, $250,000.
5. "Genetic disease due to Jak3 deficiency". Sponsor: R.A. Kirken, Recipient: F. Behbod, Schissler Foundation, 12/01/00-11/30/01, $20,000.
6. "Identification of Jak3 substrates". Sponsor: R.A. Kirken, Recipient: Z. Nagy, Gibco-BRL-Life Sciences Award, 09/01/00, $5,000.

7. "Plethysmograph work station", P.I.: R.A. Kirken, University of Texas Tobacco Settlement, Equipment Grant, 2003, $13,500.
8. "Transcription Factor Stat5a/b: A novel target for regulating T-cell activity and allograft rejection", P.I.:R.A. Kirken, Roche Organ Transplantation Research Foundation, 07/01/00-12/31/03, $200,000.
9. "The Stat5a/b proline-directed serine kinase represents a new molecular target for promoting cardiac allograft acceptance", PI: R.A. Kirken, AHA, 07/01/02-06/30/04, $78,000.
10. "Signaling pathways in Lupus T-cells", P.I.:R.A. Kirken, NIH-RO3, declined, 12/01/04-11/30/07, $223,083.
11. Pharmacology of cyclosporine based immunosuppression", PI: B.D. Kahan, (Co-Investigator) R.A. Kirken, (20%), NIH-RO1, 07/01/01–06/30/05, $1,190,000.
12. "Role of IL4/IL4R in Transplantation tolerance", PI: S.M. Stepkowski, (Co-Investigator) R.A. Kirken, (20%), NIH-R21, 09/01/01–08/31/05, $669,750.
13. "NIH T32-$5,000,000 Training Program in Craniofacial-Oral Biology Research Grant, Funding Period: 08/01/03-07/31/08. Co-Investigator: R.A. Kirken. (UT-Dental Branch). Funded Jeremy Ross.
14. T-cell growth factor pathways and immune modulation", P.I.: R.A. Kirken, NIH-RO1, 07/01/03-12/31/08, $1,171,539.
15. NIH R21 $200,000 for "The role of Socs in regulation of transplantation tolerance". P.I. Stepkowski. R.A. Kirken Co-investigator, (10%) NIHR21, 04/1/04-3/31/2005, $200,000.
16. "Screening for small molecule inhibitors of Stat5", P.I. R.A. Kirken, NIH-RO3,10/01/04-9/30/05 $74,250.
17. "Clonal Deletion of T and B Cells" P.I. S. Stepkowski, Co-PI R.A. Kirken (20%) NIH-RO1, 7/01/2004-6/31/2009, $1,000,000 direct
18. "Pharmacoinformatics". Mentor to Post-doctoral Fellow Zsuzsanna Nagy. UT Health Science Center NIHT32 Training Grant Funded salary position, 4/1/2005-3/31/2006, $49,487.
19. "Validation of a putative drug target for the treatment of Leukemia". Coldwell Foundation. (PI Kirken) $100,000 10/01/06-09/30/07.
20. "Joint program between UTEP and UTMB: Proteomics-DNA Work Station for Infectious Disease Surveillance on the US-Mexico Border". (PI Kirken and Castro), LERR Funds from UT System awarded to UTEP. $1,000,000.
21. "Nanodrop Spectrophotometer Package". (PIs Kirken and K. Johnson), Mckee Foundation, $15,000, February 14, 2008.
22. Research Center at Minority Institutions and Borders Biomedical Research Center. NIH grant (PI Natalicio). R.A. Kirken, Deputy Director. 5G12RR008124. June 1, 2003-May 31, 2008, $9,260,913.
23. "Validation of a putative drug target for the treatment of Leukemia". Coldwell Foundation. (PI Kirken) $100,000, 10/01/07-09/30/08.

24. Research Center at Minority Institutions and Borders Biomedical Research Center. NIH grant (PI Natalicio). R.A. Kirken, Program Director. 5G12RR008124. Bridge funds May 15, 2008 to March 1, 2009. $704,706.
25. "NC1153 a novel Jak3 inhibitor". P.I. R.A. Kirken. Novartis Pharmaceuticals. December 1 2004 to November 30, 2008, $318,374.
26. Texas Ignition Fund, "NC1153 as a novel agent to block allograft rejection", PI R.A. Kirken, September, 1, 2008, August 30, 2009. $50,000.
27. Boeing Corporation. "IATCS Coolant Support and Design Phase 1: Degradation of OPA. PI R.A. Kirken. 1/30/09-9/30/09, $135,720.
28. "Jak3 as a target for the treatment of Leukemia". Coldwell Foundation. (PI Kirken) $135,000 10/01/08-5/30/10.
29. "Jak3 as a target for the treatment of Leukemia". Coldwell Foundation. (PI Kirken) $125,000 2/01/10-1/31/11.
30. Research Center at Minority Institutions and Borders Biomedical Research Center. NIH grant (PI Natalicio). R.A. Kirken, Program Director. 5G12RR008124. Supplemental Funds May 31, 2008 to June 30, 2011. $480,362.
31. Research Center at Minority Institutions and Borders Biomedical Research Center. NIH grant (PI Natalicio). Co-PI R.A. Kirken, Program Director. 5G12RR008124. July 1, 2009 to June 30, 2014. $12,379,750.
32. Hispanic Health Disparities Research Center. NIH Grant (PI Provencio Vasquez, E), Kirken Co-I at 10% effort. June 1, 2009 to May 31, 2014. $4,618,451.
33. Treatment of immune mediated diseases that affect the Hispanic community. PI F. Pericle, Co-PI R.A. Kirken NIH SBIR 1R43RR032354-01. 12-2010-6-2011, $138,400.
34. Tumor Banking for the Treatment of Leukemia and Lymphoma. PI R.A. Kirken. Marsh Foundation. 12-20-2010-12-19-2011, 36,000.
35. Tumor Banking for the Treatment of Leukemia and Lymphoma. PI R.A. Kirken. Marsh Foundation. 12-24-2011-12-19-2012, 150,000.
36. "Jak3 as a target for the treatment of Leukemia". Coldwell Foundation. (PI Kirken) $100,000 01/11-5/30/12.
37. Novel Therapeutic Strategies to treat certain forms of Leukemia. Marsh Foundation. (PI Kirken) $107,503.00. December 31, 2012 – December 30, 2013.
38. "Jak3 as a target for the treatment of Leukemia". Coldwell Foundation. (PI Kirken) $60,000 07/01/16-6/30/17.
39. Premier Biomedical, Selective Depletion of Reactive Disease Causing Molecules". (PI Kirken). $1,107,315. 8/1/2012 – 7/31/ 2017.
40. Research Center at Minority Institutions and Borders Biomedical Research Center. NIH grant (PI R.A. Kirken). 5G12RR008124. April, 2014 to March 31, 2019. $14.4m

PUBLICATIONS

Selected Abstracts (from greater than 150 presentations)

1. Prochaska, L.J., Fink, P.S, Leffak, I.M. and **Kirken, R.A.**: Characterization of bacterial DNA homologous to bovine mitochondrial DNA encoding cytochrome c oxidase subunit III. FASEB J. 2: A2775, 1989.

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10. **Kirken, R.A.,** Rui, H. and Farrar, W.L.: The Nb2 lymphoma as a model for studies of signal transduction by receptors for prolactin and three cytokines which utilize the IL2 receptor γ-chain, interleukins 2,4,7. The Endocrine Society, 76th Meeting: 446, 1994.

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12. Malabarba, M.G., **Kirken, R.A.,** Rui, H., Kawamura, M., O'Shea, J.J., and Farrar, W.L.: Interaction of JAK3 and JAK1 with the IL4 receptor complex. J. Cell. Biochem. 19A:55, 1994.

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25. Wang, M.E., Yu, J., Akioka, K., **Kirken, R.A.,** Stepkowski, S.M., Kahan, B.D.: Alterations of T cell signaling from tolerant hosts induced by oral administration of an allochimeric class I MHC protein. XVIII International Congress of the Transplantation Society, Rome, Palazzo dei Congressi, August 27-September 1, 2000.

26. Tian, L., Qu, X., Wang, M.E., **Kirken, R.A.,** Bennett, F.C., Stepkowski, S.M.: Selective inhibition of IL-2 mRNA blocks allograft rejection by limiting T cell clonal expansion. XVIII International Congress of the Transplantation Society, Rome, Palazzo dei Congressi, August 27-September 1, 2000.

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cyclosporine but not rapamycin. 2001 A Transplant Odyssey, Istanbul Convention & Exhibition Center, Istanbul, Turkey, August 20–23, 2001.

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Invited Articles (Reviews, Editorials, etc.) in Journals

1. **Kirken, R.A**., Rui, H., Howard, O.M.Z., and Farrar, W.L.: Involvement of JAK-family tyrosine kinases in hematopoietin receptor signal transduction. Prog. Growth Factor Res. 5:195-211, 1994.

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13. Ross, J. A., Rodriguez, G. and **Kirken**, R.A. Analysis of Janus Tyrosine Kinase Phosphorylation and Activation. Methods in Molecular Biology 967: 3-20, 2013.

Books/Chapters

1. Rui, H., Kirken, R.A., Howard, O.M.Z., Duhe, R.J., Evans, G.A., and Farrar, W.L.: The role of hematopoietic growth factors in signal transduction. Immunopharmocology of Allergic diseases, Robert G. Townley and Devendra K. Agrawal, Editors, Marcel Dekker, Inc., pp 29-77, 1996.

2. Evans, G.A., Duhe, R.J., Kirken, R.A., DaSilva, L., Erwin, R.A., Malabarba, M.G., and Farrar, W.L.: Cytokine driven signal transmission, In New Technologies in Cell Cycle, Brian Metcalf, Fobert Roffolo, and George Poste, Editors, Harwood Academic Publishers, Amsterdam, pp 91-116, 1997.

3. Leung, M.-Y., Knapka, J.A., Wagler, A.E., Rodriguez, G., Kirken, R.A. (2016) OncoMiner: A pipeline for bioinformatics analysis of exonic sequence variants in cancer. In: Big Data Analytics in Genomics, Wong, K.C. (Ed.), pp. 373-396, Springer, New York. Available at link.springer.com/chapter/10.1007/978-3-319-41279-5_12. Accessed 11/15/2016.

Professional Communications

Presentations:

1993 **Kirken, R.A.,** Howard, O.M.Z., and Farrar, W.L. Talk entitled "Comparative analysis of prolactin and IL-2 receptor-associated phosphotyrosyl proteins and tyrosine kinase activity in lymphocytes". Neuroendocrinology VI International Prolactin Congress. (D 7): 21 1993, Paris, France, Plenary Lecture.

1993 **Kirken, R.A.** "IL2 activates a 116 kDa Tyrosine kinase", Moffitt Cancer Institute, University of S. Florida, 1993.

1996 **Kirken, R.A**. Chaired International Meeting on Standardization and Calibration, of Cytokine Immunoassays. London, England, 1996.

1997 **Kirken, R. A.** Talk entitled "IL2-related cytokines: Jak3 and Stat5 signaling pathways". Baylor College of Medicine, 1997.

1997 **Kirken, R.A.** Talk entitled "Signaling pathways mediated by IL-2 and related cytokines: Functional role of JAKs, STATs and MAP kinases. UT-Houston Medical School, December 18, 1997.

1997 **Kirken, R.A.** Talk entitled "Activation and regulation of a Stat5 serine kinase". Invited Speaker: Uniformed Services University of Health Sciences, 1997.

1998 **Kirken, R.A.** Talk entitled "Signaling pathways mediated by IL2 and related cytokines: Role of JAKs, STATs and MAP Kinases in immune regulation". November 9, 1998. M.D. Anderson, Houston, TX, November 9, 1998.

1999 **Kirken, R.A.** Talk entitled "Cytokine induced serine phosphorylation and regulation of Stat5a/b activity in lymphocytes". National Cancer Institute Workshop: Serine/threonine phosphorylation in cytokine signaling. March 31, 1999. Plenary Lecture.

1999 **Kirken, R. A.,** Erwin-Cohen, R.A., Behbod, F., Wang, M., Ku, J., Stepkowski, S.M., Kahan, B.D. Talk entitled "Tyrphostin AG490 blocks activation of JAK3 and rejection of heart allografts in rats". 25th Annual Scientific Meeting of the American Society of Transplant Surgeons. Chicago, Illinois, May 17, 1999.

1999 **Kirken, R.A.** The Woodlands Conference Center, TX. Talk entitled "Stat5a/b as Molecular Targets for Immune Suppression". October 16, 1999.

2000 **Kirken, R.A.** UT-Shared Department of Integrative Biology and Pharmacology and Internal Medicine Seminar entitled "Stat5a/b Roles in cancer and organ rejection".

2000 **Kirken, R.A.** Texas Medical Center. "Jak3 as a molecular target for controlling allograft rejection". July 17, 2000.

2000 **Kirken, R.A.,** Erwin-Cohen, R., Behbod, F., Wang, M.E., Stepkowski, S.M., Kahan, B.D. Talk entitled "Tyrphostin B42 selectively inhibits activation of the JAK3/STAT5/MAPK pathway and rejection of heart allografts in rats". XVIII International Congress of the Transplantation Society, Rome, Palazzo dei Congressi, August 27-September 1, 2000.

2001 **Kirken, R.A.** Talk entitled: "Roles for Jak3 and Stat5 in T cell Mediated Diseases". Institute of Molecular Medicine, University of Texas-Houston. September 14, 2001.

2001 **Kirken, R.A.** Talk entitled, "New strategies to identify immunosuppressive drugs that act synergistically to prolong allograft survival". University of Texas at Houston. January 14, 2002.

2001 **Kirken, R.A.** Talk entitled "T-cell signaling pathways". Symposium Sixth International Conference on Tolerance Induction. Tucson, AZ, January 21, 2001. Plenary Lecture.

2001 **Kirken, R.A.,** Behbod, F., Erwin-Cohen, R., Kahan, B.D., Nagy, Z., Wang, M.E. Talk entitled "Concomitant inhibition of Jak3 and calcineurin-but not rapamycin-dependent signaling pathways synergistically prolong the survival of heart allografts". 2001 A Transplant Odyssey, Istanbul Convention & Exhibition

Center, Istanbul, Turkey, August 20–23, 2001. Plenary Lecture.

2002 **Kirken, R.A.** Talk entitled: "Transcription factor Stat5a/b: a novel target for regulating T cell activity and allograft rejection". New Trends in Immune Suppression. Geneva, Switzerland, February 9, 2002. Plenary Lecture.

2002 **Kirken, R.A.** Talk entitled, "Jak3 and Stat5 as molecular targets for promoting allograft acceptance". Horizons in Transplantation: From theory to Practice. Amelia Island, Florida, April 24, 2002. Plenary Lecture.

2002 **Kirken, R.A.** Talk entitled: "IL2 regulates the activation of multiple Raf isoforms (A, B and C) in primary human T-cells: Role of Rafs in T-cell growth and rat heart allograft survival". American Society of Transplantation, Washington, D.C. April 28, 2002.

2002 **Kirken, R.A.** Talk entitled: "Roles for Jak3 and Stat5 in T cell Mediated Diseases". University of Debrecen, Hungary, October 18, 2002.
2002 Kirken, R.A. Talk entitled, "A Role for Jak3/Stat5a/b pathway in T cell-derived disease". University of Texas at Houston Dental Branch. November 21, 2002.

2002 **Kirken, R.A.** Talk entitled "Specific Inactivation of the Common IL2 Receptor Gamma-Chain, and to a Lesser Extent Constitutively Active Stat3, Induces Apoptosis in a Human Lymphoma Cell Line". American Society of Hematology, Philadelphia, PA, Dec. 6-10, 2002.

2003 **Kirken, R.A.** Talk entitled, "Stat5 regulation of T-cell activity", University of Texas Health Science Center and the Department of Cardiology. October 5, 2003.

2003 **Kirken, R.A.** Talk entitled "Stat5a/b-regulation of T-cells and disease". Texas Health Science Center, Division of Cardiology, Houston, TX, October 30, 2003.

2003 **Kirken, R.A.** Talk entitled "Stat5a/b: A target for regulating hematopoietic cancers". M.D. Anderson Cancer Center, Department of Molecular Hematology and Therapy, Houston, TX, November 17, 2003.

2004 **Kirken**, R.A. Talk entitled "New candidates for Jak3 antagonism". University of Texas Health Science Center, Division of Immunology, Houston, TX, March 26, 2004.

2004 **Kirken**, R.A. Talk entitled "New candidates for Jak3 antagonism". University of Texas Health Science Center Summer Research Program, Houston, TX, June 7, 2004.

2005 **Kirken**, R.A. Talk entitled "So you want to make a drug?". University of Texas Health Science Center, Houston, TX, February 18, 2005.

2005 **Kirken, R.A.** Talk entitled "Roles for Jak3 and Stat5 in T cell Mediated Diseases". University of Texas El Paso, TX, April 1, 2005.

2005 **Kirken**, R.A. Talk entitled "NC1153 Biochemistry". 28th Annual Divisional Retreat, The Division of Immunology and Organ Transplantation, UTHSC, April 21-23, 2005.

2008 **Kirken**, R.A. Talk entitled: "Career Opportunities in Biological Sciences" Seminar – NIH Sponsored Bridges Program.

2009 **Kirken**, R.A. Outreach Program-Talk entitled "Career Opportunities in Biological Sciences" Seminar –NIH Sponsored Bridges Program.

2010 **Kirken, R.A.** Talk entitled, "Signaling pathways and Cancer", Southwest Association of Hispanic American Physicians. El Paso, TX January 19, 2010.

2011 **Kirken, R.A.** Talk entitled, "Jak3 as a Target of T-cell Mediated Diseases". Clemson University, November 7, 2011.

2012 **Kirken, R.A.** Talk entitled, "New Concepts in cell Signaling and Treatment Strategies", Southwest Association of Hispanic American Physicians. El Paso, TX November 2-3, 2012.

2013-present More than 10

Community Engagement

2010 **Kirken, R.A.** Keynote Speaker to the El Paso Medical Society and its annual installation dinner. El Paso Club, El Paso, TX. January 13, 2010.

2010 **Kirken, R.A.** Outreach Presentation to Mesita Elementary School. "What is a Scientist?" El Paso, TX. January 25, 2010.

2010 **Kirken, R.A.** Keynote Speaker to the UTEP Centennial Commission. The University of Texas at El Paso. February 10, 2010.

2010 **Kirken, R.A.** Organize and present, Novartis Research Institute Visit, University of Texas at El Paso, March, 2, 2010.

2010 **Kirken, R.A.** Healthcare & Pharma: Needs, Limitations and Opportunities, University of Texas at El Paso, The Osher Lifelong Learning Institute, April 19, 2010.

2010 **Kirken, R.A.** Outreach Presentation to Mesita Elementary School. "Science is Fun!" El Paso, TX. December 17, 2010.

2011 **Kirken, R.A.** Keynote Speaker to the El Paso Rotary Club West Chapter. "Cancer". El Paso, TX. August 29, 2011.

2011 **Kirken, R.A.** Outreach Presentation to Mesita Elementary School. "Science Fair Projects!" El Paso, TX. December 6, 2011.

2012 **Kirken, R.A.** Outreach to local schools to visit UTEP to support "Brain Awareness Week", March 26 and June 12, 2012.

2012 **Kirken, R.A.** Girl Scouts of America 100 Year Anniversary. "Future Scientists of America." November 3, 2012.

2012-present **Kirken, R.A.** greater than 25 to various community groups and partners