Example Abstracts for the Faculty Development Leave Program

Each faculty development leave (FDL) proposal is reviewed at the college or library level by a committee which includes faculty representation. Each application includes a brief abstract which is reviewed by the Board of Regents prior to approval of the leave.

These abstracts are limited to 100 words, must be written in the third person, **should be written for an educated layperson**, and must include:

- Place where leave will take place
- Activities that will take place during the leave
- Benefits of the leave to:
  - Research program
  - Students/teaching
  - Department, college and/or university
- Expected impacts (should be focused on effects beneficial to the University)

**Note: the abstract should not be composed of bullet points; the outline provided above is for guidance in composition only.*

Over the past several years, an increasing number of abstracts have been submitted which do not meet the Board of Regents' criteria listed above. This has resulted in many of the abstracts having to be re-written by the FDL liaisons for the college, or by DOF or TAMU System staff in order for the abstracts to be acceptable and the FDL to be granted to the faculty member.

Beginning in 2015, we will no longer re-write abstracts that fail to meet the Board of Regents' standards listed above. Abstracts which do not meet these standards will be returned to the faculty member who is applying for leave to be re-written. If the re-written abstract is submitted after October 23, or if the re-written abstract is not satisfactory to the committee, the faculty member will be denied leave.

In order to provide guidance to faculty members, department heads, college review committees, and deans, the following table contains a number of the abstracts which were edited and submitted to the Board of Regents last year, presented next to their original submitted form. The abstracts are organized by college. Faculty member's names have been removed, but the details of their leave have been left in place so as not to alter the meaning of the abstracts.

College of Science

Before	After
The faculty development leave will take place at both Texas A&M and Stanford Universities. The objective is to document important computer programs developed exclusively at TAMU in physical chemistry and to make these available on a TAMU internet site. An accompanying monograph outlining the theory and methodology will also be prepared. Access to these programs will be invaluable to researchers at TAMU and to scientists around the world. This will bring even more international recognition of the past research. The availability of the internet site will therefore enhance the reputation of the Department, the College, and the University itself.	Leave will take place at Texas A&M and Stanford University. The objective is to document important computer programs developed exclusively at Texas A&M in physical chemistry and to make these available on a Texas A&M internet site. An accompanying monograph outlining the theory and methodology will also be prepared. Access to these programs will be invaluable to researchers at Texas A&M and to scientists around the world and will bring even more international recognition of past research. The availability of the internet site will, therefore, enhance the reputation of the department, the college, and the university.
Place Germany: split between Universität Regensburg, Max-Planck-Institut für Molekulare Physiologie in Dortmund, and possibly one other city. Activities To interact with investigators doing cutting-edge research on the design and applications of small molecules as probes to impede protein-protein interactions. Benefits (to research program, teaching, department college of TAMU) Enhances the PIs research program that is focused on design and applications of small molecules as probes to impede protein-protein interactions. Expected Impacts New and strengthened collaborations with the laboratories visited, exchange of ideas, and importing new techniques into the PIs lab at TAMU.	Dr. XXX will spend his leave in Germany collaborating with investigators at Universität Regensburg and Max-Planck-Institut für Molekulare Physiologie in Dortmund. The collaborations will focus on the design and applications of small molecules as probes to impede protein-protein interactions. These collaborations will enhance Dr. XXX' research program, strengthen institutional ties with the laboratories visited, facilitate the exchange of ideas, and benefit Dr. XXX' laboratory and students at Texas A&M by introducing new techniques.
The proposed leave will allow the redaction of a lecture notes on "Geometric Partial Differential Equations" in collaboration	Leave will take place at Texas A&M with several visits planned to the University of Maryland. The proposed leave will allow

with Prof. Nochetto at the University of Maryland. It will take place at Texas A&M with several visits planned to the University of Maryland. The resulting manuscript intends to fill a lack of state-of-the art comprehensive reference in this extremely active research topic with direct impact in science and engineering, thereby strengthen our position of leaders in this area. In addition, this contribution will be accessible to graduate students and adequate to serve as a graduate class textbook.	the redaction of lecture notes on "Geometric Partial Differential Equations" in collaboration with Professor Nochetto at the University of Maryland. The resulting manuscript intends to fill a lack of state-of-the art comprehensive reference in this extremely active research topic with direct impact in science and engineering, thereby strengthening Texas A&M's leadership position in this research area. In addition, this contribution will be accessible to graduate students and will serve as a graduate class textbook.
During my development leave, I will be visiting a number of institutions and universities: Livermore National Laboratory (LLNL), Fraunhofer Institute for Applied Mathematics (ITWM), and King Abdullah University of Science and Technology (KAUST). In LLNL, I plan to work with P. Vassilevski on our joint DOE grant on exascale computational methods for uncertainty quantification. In ITWM and KAUST, I plan to work on porous media modeling and simulations from pore-scales to large scales. Expected benefits include large-scale applications of our recently developed multiscale techniques, future opportunities for graduate students, more future research funding	During his leave, Dr. XXX will visit a number of institutions and universities: Livermore National Laboratory (LLNL) in Livermore, California, Fraunhofer Institute for Applied Mathematics (ITWM) in Germany, and King Abdullah University of Science and Technology (KAUST) in Thuwal, Saudi Arabia. In LLNL, he plans to work with Dr. P. Vassilevski on a joint Department of Energy grant on computational methods. At ITWM and KAUST, he will work on simulating the behavior of porous material, such as sandstone, filters, batteries, and membranes. Expected benefits include future opportunities for graduate students and additional research funding. These expected benefits will also raise the profile of the department and Texas A&M in the research community.
Leave (Fall, 2015) will be spent, in large measure, in the Renyi Institute of Mathematics in Budapest, where, as an associate member of the Institute, I am entitled to use the infrastructure freely. I hope to work successfully on a variety of problems and submit my results to some of the best mathematics journals. I plan to work alone as well as in collaboration with various other researchers, and to accept invitations to other mathematical centers. I plan to present some of my results at various seminars, conferences, and	Leave will be spent at the Alfréd Rényi Institute of Mathematics in Budapest, Hungary, one of the strongest mathematics centers of the world in combinatorics, discrete mathematics, number theory, and computational complexity. Dr. XXX expects interactions with leading Hungarian mathematicians, especially with Dr. Vilmos Totik and Dr. Szilard Revesz, to be very useful for his current research projects. He plans to use this opportunity to advance the understanding of the extremal properties of polynomials and exponential

meetings. I hope this will bring credit to the Texas A&M University.	sums. This visit will provide for direct contact with strong Hungarian students who may be interested in pursuing graduate studies at Texas A&M.
I would like to apply for a faculty departmental leave for the academic year of Fall 2015-Spring 2016, in order to make long visits in several institutions in Europe, where many of my collaborators are based. In particular, I am planning to make long visits in Paris VI and Paris Est in France, in Technion University in Israel, in the Universities of Athens and Crete in Greece, in order to continue ongoing collaborations with researchers in these departments. I expect that these visits will be extremely beneficial for my research, I will be able to communicate recent result and further expand my knowledge and my research interests.	Dr. XXX leave will be spent at the University of Paris VI and the University Paris-Est in France, Technion University in Israel, and the Universities of Athens and Crete in Greece. His work will attempt to advance research programs on inequalities in log-concave measures by working on random matrices, and exploring randomized inequalities. He plans to give a series of talks based on this work with the goal of recruiting excellent students for Texas A&M's graduate programs. His leave will benefit Texas A&M by attracting strong graduate students and will help solidify Dr. XXX leadership position in his field.
Professor XXX plans to spend Fall 2015 at Technical University of Munich in Germany. He was invited by Professor Peter Gritzmann (former president of the German mathematical society) to teach an advanced topics course for undergraduates, and to continue their ongoing collaboration on new methods for solving large systems of non-linear equations. This work will help computational scientists attack important problems --- such as physical simulations --- currently out of reach. XXX visit to TU Munich as von Neumann Visiting Professor increases the visibility of Texas A&M, and will benefit the research programs of both XXX and Gritzmann.	Professor XXX plans to spend the leave at Technical University (TU) of Munich in Germany as a von Neumann Visiting Professor. He was invited by Professor Peter Gritzmann to teach an advanced topics course for undergraduates and to continue their ongoing collaboration on new methods for solving large systems of non-linear equations. This work will help computational scientists in the area of physical simulations. Dr. XXX visit to TU Munich as a von Neumann Visiting Professor increases the visibility of Texas A&M and will benefit the research programs of Professors XXX and Gritzmann.
To visit Academy of Mathematics & Syetems, CAS, Beijing and Hunan Normal University, Changsha, in China. To conduct existing and explore new collaborative research/education programs (initiated/supported by NSF/NSFC US-China CMR Program in 2008, still very active as part of my NSF supported projects and efficient in publications and Ph.D. student supervision), seek for funding, recruit Ph.D students and to bring back new research	Leave will be spent at the Academy of Mathematics & Systems Science and Beijing Normal University, both located in Beijing, China, and Hunan Normal University, in Changsha, China. Dr. XXX will continue several existing research collaborations with colleagues at these institutions and will also explore avenues for funding, recruiting Ph.D. students, and organizing a collaborative international math program with Beihang University, Beijing. Dr. XXX

ideas/projects. To systematically organize results obtained in the last 16 years as a book “Computational Theory and Methods for Solving Multiple Solution Problems". The first part as a graduate lecture notes was taught in 2010. Many new results will be added.	also plans to systematically organize his research results obtained over the last 16 years into a book entitled *Computational Theory and Methods for Solving Multiple Solution Problems*. Texas A&M will benefit by the addition of excellent graduate students, increased international visibility, and the incorporation of Dr. XXX research into his teaching which will increase the quality of his courses.
The leave will be at Spin Phenomena Interdisciplinary Center (SPICE) in Johannes Gutenberg Universität, Mainz, Germany. I will be involved in organizing the center's workshops and continue the ongoing collaboration with Dr. Sinova, which has already resulted in a number of publications. My students will collaborate directly with Dr. Sinova's group. The close collaborations with many European Universities and research centers will attract good researchers to us and open new funding opportunities. I expect to: Increase visibility of my group's research; Finish some ongoing projects and publish the results; Formulate new research directions; Find new funding opportunities.	Leave will take place at Spin Phenomena Interdisciplinary Center (SPICE) in Johannes Gutenberg Universität, Mainz, Germany. Dr. XXX will be involved in organizing the center's workshops on spin phenomena and continuing an ongoing collaboration with Dr. Sinova, Director of SPICE, which has already resulted in a number of publications. Dr. XXX students will collaborate directly with Dr. Sinova's group. The close collaborations with many European universities and research centers will attract researchers to Texas A&M and open new funding opportunities.
Prof. XXX proposes faculty development leave at the Hubble Space Telescope Science Institute (STScI) at the Johns Hopkins University. At STScI, Dr. XXX will work closely with resident experts on the analysis of recent, ultra-deep Hubble Space Telescope images to understand how galaxies like our Milky Way came to be. The outcome of this research will provide high profile, peer-reviewed papers. Dr. XXX will work with STScI’s educational and public outreach (EPO) office to bring the latest EPO techniques and activities back to Texas A&M, which will benefit his classroom teaching and his direct interaction with students.	Dr. XXX will spend his leave at the Hubble Space Telescope Science Institute (STScI) at the Johns Hopkins University. At STScI, Dr. XXX will work closely with resident experts on the analysis of recent, ultra-deep Hubble Space Telescope images to understand how galaxies like the Milky Way came to be. The outcome of this research will provide high profile, peer-reviewed papers. Dr. XXX will work with STScI’s Educational and Public Outreach (EPO) Office to bring the latest EPO techniques and activities back to Texas A&M, which will benefit his classroom teaching and his direct interaction with students.
Leave will be spent in part in College Station to prepare a renewal proposal for a competitive NSF grant in theoretical nuclear physics. The other parts will be	Leave will be spent in part in College Station to prepare a renewal proposal for a competitive National Science Foundation grant in theoretical nuclear physics. Time

spent at two leading international research institutions, at the Center for Heavy-Ion Research (GSI) in Darmstadt (Germany) to foster existing collaborations, and at the Variable Energy Cyclotron Center (VECC) in Kolkata (India) to build new ones. Forefront research will be conducted on the Quark-Gluon Plasma, a new state of matter that likely existed in the very early Universe.	will also be spent at two leading international research institutions – at the Center for Heavy-Ion Research in Darmstadt, Germany, to foster existing collaborations, and at the Variable Energy Cyclotron Center (VECC) in Kolkata, India. Forefront research will be conducted on the Quark-Gluon Plasma, a new state of matter that possibly existed in the very early universe. Texas A&M will benefit from this leave by enhanced international visibility in the research community and the building of closer research ties with international institutions.
Dr. XXX proposes to spend her faculty development leave in the center for statistical sciences at Peking University (PKU), China. She plans to collaborate with local researchers at PKU to investigate methods for large spatial datasets and extreme values with applications in environmental science and finance. She also proposes to give seminars and technical talks in PKU and other universities. Dr. XXX will utilize the unique resources in PKU, and the expected results will have impact on both academia and industry. Dr. XXX development leave at PKU will also promote the awareness of TAMU and help recruit top graduate students	Dr. XXX will spend her faculty development leave at the Center for Statistical Sciences at Peking University (PKU), China. She plans to collaborate with local researchers at PKU to investigate methods for large spatial datasets and extreme values with applications in environmental science and finance. She also proposes to give seminars and technical talks at PKU and other universities. Dr. XXX leave at PKU will increase the visibility of Texas A&M and help recruit top graduate students.
The proposed leave will take place at the NSF institute The Statistics And Applied Mathematical Sciences Institute (SAMSI) in the Research Triangle, NC, and Spiegelman will be physically in residence during the fall semester. XXX will lead the institute year-long program on forensic science. During the remainder of the year, he will carry out leadership duties via Skype and a couple of two-day visits per month. He is the head of the yearlong research program on forensic science. Roughly, 125 leading researchers will be involved, and SAMSI will provide post docs, that will be supervised by XXX.	The proposed leave will take place at a National Science Foundation Institute, the Statistical and Applied Mathematical Sciences Institute (SAMSI) in the Research Triangle, North Carolina. Dr. XXX will reside in North Carolina during the fall semester leading the institute's year-long program on forensic science. Following his leave in the fall, he will carry out leadership duties via Skype and two-day visits throughout the remainder of the program. Approximately 125 leading researchers will be involved and SAMSI will provide post docs that will be supervised by Dr. XXX. Texas A&M will be in a national and international leadership position in forensic science reform through Dr. XXX program leadership. As part of the program, a novel

	forensic statistical and mathematics forensic science course will be developed so that Texas A&M students will have access to class notes and course content from national forensic research leaders.