

Texas Tech University

New WISE Ph.D. Student Guide

CURRENT AS OF July 2010

This document was developed by NSF IGERT Fellows & WISE Ph.D. students over a seven-year period. This is version 4.0.

DISCLAIMER

The material presented here is a compilation of ideas from experienced IGERT & WISE Ph.D. students. For questions, do not hesitate to contact them. Keep in mind that this is an evolving body of knowledge. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of Texas Tech or the Wind Science and Engineering Research Center.

Table of Contents

1. Entertainment In and Around Lubbock
2. Local Restaurants
3. Getting around and Parking
4. Dissertation Policies and Procedures
5. Faculty and Research
6. Ongoing Projects
7. Getting paid
8. Going on your internship
9. Travel Procedures
10. Who to contact
11. Remote Connections
12. Graduates of WISE

ENTERTAINMENT IN AND AROUND LUBBOCK

1. General Info: <http://www.lubbockfunclub.com>
2. Lubbock Parks and Recreation: (<http://parks.ci.lubbock.tx.us/>)
3. Center for Campus Life: www.depts.ttu.edu/centerforcampuslife/
4. Drive-In movies: www.driveinusa.com- 2 movies for the price of 1, bring as much food as you can carry.
5. Bowling: www.bowlinginlubbock.com/centers.htm
6. Movie Theaters: (<http://www.cinemark.com/> enter Lubbock Zip code 79409)
7. Hiking/Camping: Palo Duro Canyon State Park (really excellent)
(<http://www.palodurocanyon.com/>)
Caprock Canyon State Park:
(http://www.tpwd.state.tx.us/spdest/findadest/parks/caprock_canyons/)
8. Fishing/Boating within 3-4 hours of Lubbock: Lake Allen Henry
<http://lah.ci.lubbock.tx.us/>
Buffalo Springs Lake: www.buffalospringslake.net
9. Skiing: Ruidoso, NM- about 4 hours driving... or anywhere west.
10. Family or friends visiting: Carlsbad Caverns National Park (3 hr. drive):
<http://www.nps.gov/cave>
11. Roller Coasters: Six Flags Over Texas in Arlington, TX (about 5 hours drive) or Six Flags Fiesta Texas in San Antonio, TX (about 6 hours drive).
12. Nice Place to cook-out: Silver Falls Park
<http://www.traveltex.com/pg/Activity.aspx?id=742bbfbc-414d-4b8b-acc3-b831478622db>
13. Golf: many golf courses <http://www.golflink.com/golf-courses/city.aspx?dest=Lubbock+tx>
*Don't forget the TTU Rawls Course, ranked #2 in something by Golf Digest

Alcoholic beverage container sales have only been approved in the city of Lubbock as of late May 2009, so if you need your 12-pack of Milwaukee's Best, you'll only need to find beer and wine at every grocery store, and liquor stores are now all around town.

Local Restaurants

Restaurant Guides:

<http://www.discoverourtown.com/TX/Lubbock/Dining-319.html>

<http://lubbock.areacconnect.com/restaurants/>

Favorites:

Rudy's -On slide and the loop, great BBQ, ribs, and breakfast burritos

Cagle's -West Texas atmosphere out on 4th close to Reese, steak & BBQ

Rosa's -good and fairly cheap tex-mex food. Go on Taco Tuesday to get 3 tacos, beans, rice, & two tortillas for \$3.69. Has a drive-thru too & found all over town.

It's Greek to Me -NW corner of University and the south Loop, great gyros, nice owners

Abuelo's Restaurant (Quaker & 82nd): A fine restaurant to eat the best enchiladas, salmon, hot salsa and chips.

Ruby Tequilas -another good Mexican Restaurant, just south of 82nd and University & 2nd location on University and Glenna Goodacre.

Free-birds (Slide & S. loop by Old Navy; 2nd location on University and Broadway): If you are looking for a big burrito, this is the place for you...

Crickets-the classic bar within walking distance of campus (just east of University on Broadway). Large selection on tap and lunch specials for \$5 include sandwich/burger with fries and a drink. Expect slow service.

Orlando's-Yummy local Italian with the occasional Tex-Mex flair. Two locations, one on Ave. Q, the other at 60th & Indiana. Important because they will deliver meals to campus.

One Guy From Italy-North of Broadway on University. \$5 lunch special includes drink and a calzone the size of your head.

Pei Wei-Kingsgate North at Quaker & 82nd. If you come from a cultured city and miss Asian fusion, this might satisfy your craving.

50 Yard Line- longtime Lubbock tradition and good steak house. Located at Loop 289 and University. <http://www.50-yardline.com/Pages/home.html>

Las Brisas Steak House- <http://lasbrisassouthweststeakhouse.com/> nice steak house, expensive. Located at 112th street off of Quaker.

McAlisters Deli-2 locations, 82nd and Quaker, 19th and University. Good deli style sandwiches and great iced tea. <http://www.mcalistersdeli.com/>

Gardski's Loft- On Broadway between University and Avenue Q; down-home Southern comfort food. If Fried Chicken is new to you, go here first.

Ohana's Japanese Steakhouse- 5510 4th Street, 792-0144

Jimmy John's Gourmet Sandwiches- 2413 Broadway, 740-0002

SOME GREAT LUBBOCK MEALS

Okay, so Lubbock does not have the five star restaurants. But it does have some great meals at college student prices. Recommended additions to this list are welcome (no chains allowed). List courtesy of Dr. William Pasewark.

Where to Go	What to Order	Comments
Cagle's	Steak	Unique setting; somewhat ordinary food, but I know many who love it.
Chimey's	Fish Tacos	Basically a college bar, but they make a decent set of San Diego style fish tacos
Furr's Cafeteria	Chicken Fried Steak, fried okra, pecan pie	Some say Hill Country Germans, who missed schnitzel from the old country, invented CFS. Furr's is an old Lubbock institution. My feeling is that Furr's went downhill when it adopted the "all you can eat buffet" format. This meal is packed with calories; however, it is a great CFS and is consistent in quality.
Fuzzy's Tacos	Pork Tacos	Great mix of downtown and campus crowd. Tasty tacos.
Home Café	Big Kid's Grill Cheese Macaroni and Cheese	Specializes in "comfort food"; new menu every day.
Josie's	Huevos Rancheros	There are several locations, but 2 nd Street and University is my favorite. There are plenty of regulars and Josie herself is there most of the time. Some rave over the Big Mama Burrito, but my appetite is not that large. The huevos rancheros are great for breakfast, lunch, or supper.
One Guy from Italy	Lunch Special – two slices of pizza and a drink	Really owned by a guy from Italy; has another location in Las Vegas, Nevada. Solid food at great price. Will make you give up pizza from the chains. A man named Dario (great guy) manages the University location.
Ranch House	Anything on the breakfast menu.	Located in the heart of the Cotton Exchange area of Lubbock (where the local farmers go to sell their crop). Epitomizes what a West Texas downtown café should be. Owned and operated by Sharen and Robert Musselman (who once owned a stockyard and decided to do run a café for "retirement"). The lunch specials change daily, but CFS is one of my favorites.

Where to Go	What to Order	Comments
Riversmith's Catfish	Regular Catfish Dinner	The old location was moved to make way for the Marsha Sharpe Freeway. This is pretty decent catfish and an abundance of fried side dishes. Lines are too long on Fridays during Lent.
Sazón	Something with Fajita meat	This restaurant is located across from campus on university and is often mistaken for a hair salon. It has limited seating so be prepared to accept take-out.
Saigon Café	Spring Roll and Chicken with Lemongrass	Okay, this is not typical West Texas, but it is great food. Order at the counter; it will be out in moments. For me the spring roll is a must. The lemon grass chicken and beef with scallops is one of several great entrees.
Shrimp Galley	Shrimp Platter	If you are from the Coastal Bend, you no doubt realized you are 450 miles from decent shrimp. This place is not a Kemah substitute, but it works in a fix. They fly the shrimp in reasonably fresh. The restaurant is a variation of a previous location on 34 th and Flint. Most of the patrons are over 60.
Thai Pepper	Green Curry	No one comes to Lubbock to find Thai food, but this place is really big city quality. Their curries compete with those I have tasted in San Francisco.
Tom and Bingo's	Sliced Beef Sandwich, August Fried Pie	T&B's has been in the same location since the early 1950s. Tom's son, Dwayne Clanton and wife, Liz, now run the place. Seating in small desks will remind you of a third grade classroom. Recognized by <i>Texas Monthly</i> as one of the best barbeque places in Texas. Don't forget to put the sauce on your sandwich, it is almost drinkable.

GETTING AROUND AND PARKING

Campus

Parking on campus costs \$, for more information go to <http://www.depts.ttu.edu/parking/index.php>. The distance from commuter lots to the Civil Engineering building is considerable. The best thing to do is to park for free down Broadway Ave. (across TTU main entrance) away from campus and walk in (plan to get to Texas Tech at least 20 minutes before your class). On a non-crowded day you may get to park next to St. Elizabeth's Catholic Church, on a crowded day, it may be several hundred yards further down. Free parking is also available on side streets north of Broadway. Turn right at Starbucks off University and start looking between apartment buildings.

The Atmospheric Science department is located on the 12th floor of the Business Administration building. If you try to park in the Tech Terrace neighborhood (19th Street and south, between University and Indiana) you'll most likely get a ticket. Follow the posted signs!

The Wind Engineering offices are located on the first floor of the Civil Engineering building, north side.

Campus maps can be obtained from www.ttu.edu

Reese Technology Center

To get to Reese, head west on 4th street from downtown or the west loop (-6 miles from the west loop) until 4th street dead ends on Research Blvd. Take a right, then a quick left, and you're at Reese Technology Center. To get to building 250, take an immediate left after the guard booth (Gilbert Street) and follow that road around until you see what looks like an old gas station canopy with a bunch of super-secure anti-coagulant barbed wire around it. Turn right onto that adjacent street (11th Drive), and buildings 350 (Debris Impact Facility) and 250 (West Texas Mesonet & PhD offices) will be on your left. Parking is of course free and plentiful.

Watch out on 4th Street between Milwaukee and the railroad tracks for the occasional speed trap. They WILL pull you over.

QUALIFYING & DISSERTATION -POLICIES AND PROCEDURES

Your dissertation committee must consist of at least one TTU faculty member from two separate disciplines.

The minimum requirement for number of committee members for the WISE PhD is 3 and this is the recommendation. You can have more members, though more than 4 are not recommended.

One of the first things you will have to do (i.e. hoops you have to jump through) is complete a degree plan. The form for this can be found at

<http://www.depts.ttu.edu/gradschool/docs/current/DocDegPlan.doc>

Make sure you get this form in as early as possible (i.e. end of year 1 on the program), and keep on the Graduate School about looking over it and approving it. In the past, the graduate school has taken as much as 1 Year to even look at a form, so never assume that just because you didn't hear anything back that it is approved. Contact them often and early until you get copy-confirmation that your plan was approved. The contact point in the graduate school for PhD forms is Gloria McNeme

Gloria.mcneme@ttu.edu 742-2781 ext. 229.

A step-by-step timeline guide for PhD seekers is here:

<http://www.depts.ttu.edu/gradschool/docs/current/DocDegSteps.pdf>

The TTU Graduate School Thesis and Dissertation manual can be found here:

<http://www.depts.ttu.edu/gradschool/current/THDGuidelines.php>

Wind Engineering defaults to *A Manual for Writers of Term Papers, Theses, and Dissertations* by Kate L. Turabian. Several copies of this are available to check out in the Wind Library. Also handy is a binder called "Writing Your Dissertation with Microsoft Word" and that resides on Kyla's bookshelf at Reese.

Other online forms from the TTU Graduate School can be found here:

<http://www.depts.ttu.edu/gradschool/current/DocForms.php>

The qualifying exam is a bit of an enigma, as there is no WISE standard and you are at the mercy of your committee chair. Generally, past students have had 24 hours to take the test, and they were free to use any resource (books, internet) other than other humans to answer the questions. The degree of difficulty of the test will likely be determined by the discipline of your committee chair. With that said, be cognizant that you are attempting to finish PhD-quality research in essentially 1.5 years (3 or 4 yrs minus 1 or 2 years of classes minus 0.5 year internship = 1.5 years), where other PhD students across the country are taking 4.5 years. Thus, you really don't have a whole semester to spend just studying for this big flaming hoop to jump through. The faculty realizes the WISE PhD timeline is somewhat unrealistic, use this point to talk it out with your committee and agree upon an expected degree of difficulty of qualifying exam before you take it. But don't disregard the seriousness of the exam. Some WISE PhD students have been known to have failed the exam and exit the program. You are allowed 2 attempts at successfully completing the qualifying exam.

FACULTY AND RESEARCH

Faculty for the WISE program are scattered across the campus in different disciplines, so don't be afraid to put on your walking shoes and go see them.

Students may know a little about the ongoing research and their respective PI's and background; you are welcome to ask older students' for a recommendation onto what faculty may be a good match to your interests. Also, be aware that identifying a topic of research is not an easy task; in fact it will probably plague you for months and is the essence of a PhD. We all have struggled a lot to define the starting point, after that, it gets more exciting. Feel free to contact current students and brainstorm with them your interests if you like, they might help as interlocutors so that your starting point makes a good transition between education and real-application (research). Plus trying out ideas on other students will save you a lot of time setting up meetings with professors who may not want to sit for hours on end and discuss your philosophical wanderings.

Faculty Member	Title	Department	Email Address
Beruvides, Mario	Associate Professor	Industrial Engineering	mario.beruvides@ttu.edu
Chen, Xinzhong	Assistant Professor	Civil Engineering	xinzhong.chen@ttu.edu
De-Silva, Dakshina	Assistant Professor	Economics and Geography	dakshina.de-silva@ttu.edu
Ekwaro-Osire, Stephen	Associate Professor	Mechanical Engineering	stephen.ekwaro-osire@ttu.edu
Ewing, Bradley	Associate Professor	Business Administration	bradley.ewing@ttu.edu
Giesselmann, Michael	Professor	Electrical and Computer Engineering	michael.giesselmann@ttu.edu
Gilliam, Kathleen	Research Associate	Mathematics	kathleen.gilliam@ttu.edu
Guynes, Jerry	Research Associate	Civil Engineering	jerry.guynes@ttu.edu
Haq, Saif	Assistant Professor	Architecture	saif.haq@ttu.edu
Hill, Glenn	Associate Professor	Architecture	glenn.hill@ttu.edu
James, Darryl	Associate Professor	Mechanical Engineering	darryl.james@ttu.edu
Kiesling, Ernst	Professor	Civil Engineering	ernst.kiesling@ttu.edu
Liang, Daan	Assistant Professor	Engineering Technology	daan.liang@ttu.edu
McComb, Robert	Assistant Vice President for Economic Development	Economics and Geography	robert.mccomb@ttu.edu
Mehta, Kishor	P.W. Horn Professor	Civil Engineering	kishor.mehta@ttu.edu
Mulligan, Kevin	Director, Center for Geospatial Technology	Associate Professor, Geography	kevin.mulligan@ttu.edu

Nagihara, Seiichi	Associate Professor	Geosciences	seiichi.nagihara@ttu.edu
Peterson, Richard	Professor	Atmospheric Science	richard.peterson@ttu.edu
Parameswaran, Siva	Professor	Mechanical Engineering	siva.parameswaran@ttu.edu
Schroeder, John	Director, Wind Science and Engineering Research Center	Associate Professor, Atmospheric Science	john.schroeder@ttu.edu
Smith, Douglas	Associate Professor	Civil Engineering	doug.smith@ttu.edu
Smith, Milton	Professor	Industrial Engineering	milton.smith@ttu.edu
Swift, Andrew	Professor	Civil Engineering	andy.swift@ttu.edu
Weiss, Christopher	Associate Professor	Atmospheric Science	chris.weiss@ttu.edu
Zuo, Delong	Assistant Professor	Civil Engineering	delong.zuo@ttu.edu

ONGOING PROJECTS

Want to get involved in something? Your help could be of great benefit to all of us and Texas Tech. Though you may be at the end doing something different in your research, getting involved in some other things give and polish skills that you would never get otherwise. Helping a little bit in projects could even help you see what you want or not for your time in research later. "Out-of-field" experiences can be very cool, allow yourself the opportunity to explore new things. The questions below are just intended to give you an overview and few examples of things where you may help out, but don't limit yourself, probably there are a lot of areas we forgot.

Below are a FEW examples of professors and probable work they are doing:

Ask Dr. Parameswaran if there is any computational work needed where you can give a hand? (e.g. computational fluid dynamics)

Ask Dr. Schroeder what wind projects are ongoing and where you could give a hand? (e.g. thunderstorm & hurricane research, wind energy)

Ask Dr. Chen or Dr. Zuo if there is any computer simulation or full-scale tests of bridges or high-rise buildings and wind interaction where you could be of help.

Ask Dr. Doug Smith, out from all the data already collected (e.g. WERFL), if there is any analysis you could help him out with bluff-body aerodynamics.

Ask Dr. Beruvides or Dr. Ewing if there is any project he might be doing in policy systems or economics.

Ask Dr. Schroder or Dr. Weiss about StickNet efforts, Radars, Mesonet, past landfalling hurricanes and if there is any field work, construction, or analysis you could help with.

Ask Drs. Liang and Ewing about their economic resiliency project and if they need help.

You could say something like: "Hello Dr. __, I have a little extra time every week and since I am interested to know more about __, I would like to get acquainted with your work and see if there is any possibility where I could help out with any research or work you might be doing".

Many other professors do something related to wind, so don't limit your search to this list, go to the Faculty list given in this binder.

GETTING PAID

Getting paid is something that in the past has been a source of much strife, but has rapidly gotten much better as the University figures out what to do with us.

ALL STUDENTS: Direct Deposit

Go to Drane Hall, 2nd floor (on campus) to fill out a form for direct deposit. If you switch from RA to Scholarship Stipend and back, you may have to do this again, so be aware. They have 30 minute parking out front (access from University south of Broadway), so just drive right up and make your moves.

If you have trouble, contact Kelsey. The financial position for Wind is currently held by Sara Grano. In the past, the Wind financial position has been through several people, so be nice to Sara! She's constantly learning and has only been here for just over a year. So brace yourself for rending of garments and gnashing of teeth, and don't blame anything on Kelsey or Sara.

Fall 2008 & Future students:

First step- find out how you're funded! Ask Kelsey or Sara Grano in WISE what account you're being paid from. Knowing this can help you clear up how your money will get to you. For example: If you are being paid as a **Research Assistant (RA)**, you will be paid through the Human Resources Payroll office and receive a payroll check as an employee of TTU. You should set up Direct Deposit right away.

If you are being paid on **fellowship/scholarship** (these words are somewhat interchangeable at TTU, beware!), you will be paid through the Scholarship Office, which routes through Student Business Services (SBS), and they can direct deposit to your bank account. Go to SBS and find out how this works. Kelsey will do her best to help and make sure you get paid, but you have to keep her informed if there are any kinks in the system, i.e. your paycheck is wrong, late, or never arrives.

GOING ON YOUR INTERNSHIP

A 3-5 month internship is required as part of the IGERT program. It can be pretty much with any legitimate organization that agrees to take you, who also in some small way relates to "wind" or "engineering" or "wind engineering." Moving to a temporary location for that amount of time has proved to be a formidable logistical challenge, so feel free to ask other students for a narrative of their past experiences. Sometimes it calls for creative measures. Faculty, staff and other students can be very helpful in networking you to good internship contacts. It's pretty much up to you to find your position though.

PAST INTERNSHIP LOCATIONS:

Kevin Walter -Cinergy Corp., Cincinnati, OH (now merged with Duke Energy)
Andrea Jackman -Oklahoma Climatological Survey/Center for Spatial Analysis
Maribel Martinez -Wisconsin Emergency Management/USDA
Dennis Noll-Treco Production Company, Yukon, OK
Becca Edwards -LSU Hurricane Center, Baton Rouge, LA.
Hector Cruzado -University of Western Ontario, Boundary Layer Wind Tunnel
Kirsten Orwig -Applied Research Associates with Tim Samaras, Littleton CO
Brandon Storm -NCAR, MMM division (WRF), Boulder, CO
Rolando Vega-ABS Consulting, San Antonio, TX
Crystal Maeker-Babcock & Brown Wind Engineering, Houston, TX
Tanya Brown- Institute for Business and Home Safety, Tampa, FL
Paddy Fowler- 3TIER, Seattle, Washington
Ian Giammanco- NOAA Hurricane Research Division, Florida
Frank Lombardo- NIST
Amber Reynolds- NASA Goddard Flight Center
Anita Schiller- State Farm Insurance, Indiana
Andrew Widmer- Tokyo Polytechnic Institute of Japan
Brian Zachry- University of Florida, Hurricane Research
Andrew Widmer- Tokyo Polytechnic Institute, Tokyo, Japan
Joseph Dannemiller- ABS Consulting, San Antonio, TX
Simon Wayne- Iowa State University Wind Tunnel, Ames, IA
Chris Pattison- STEM Wind, Dallas, TX
Jason McNeill- Sandia National Laboratory, Albuquerque, NM
Kuangmin Gong- Vestas Research and Development, Houston, TX

Internship Facilitators: Hispanic National Internship Program (not just for Hispanics) - www.hnip.net: Helps find an internship through federal agencies at Washington DC or at various field sites matching your interests. Pays a weekly stipend plus traveling expenses and helps you find housing. Be aware that it may be two-to-four weeks before the date you start when you know what you are doing so make sure that's ok.

Possible Agencies/Corp. that Expressed Interest in Hosting a WISE PhD Intern:

***Federal Alliance of Safe Homes (FLASH) (Tallahassee, FL)** -A non-profit, public/private coalition dedicated to promoting and encouraging family and home safety. Funding possible with 1 year -6 month advance notice. Contact: Leslie Chapman-Henderson (CEO) email: leslie@flash.org Also, talk to Dr. Kiesling about this organization as he works closely with them.

***Florida Division of Emergency Management (Tallahassee, FL)** 850-413-9969
www.floridadisaster.org Sam Owens sam.owens@em.myflorida.com

***Governor's Division of Emergency Management (Austin, Texas)** Contact:
Gregory.Pekar@txdps.state.tx.us

***Wisconsin Emergency Management (Madison, WI)** Contact:
kent.maclaughlin@dma.state.wi.us or diane.kleiboer@dma.state.wi.us

***USDA -several programs available, check the website**

***Oklahoma Climatological Survey (Norman, OK)** contact Mark Shafer, mshaferrw@ou.edu

***Institute for Business & Home Safety (Tampa, FL)** contact Dr. Tim Reinhold, 813-675-1042, treinhold@ibhs.org. Also, alumnus Dr. Tanya Brown works there- email her.

***ABS Consulting (San Antonio, TX)**- Dr. Rolando Vega is a WISE Alumnus and this firm is well known in the wind engineering industry. 210-495-5134 www.absconsulting.com

***NOAA Hurricane Research Division (Miami, FL)** www.aoml.noaa.gov/hrd/index.html 305-361-4450

Storage Info:

Storage: B & W Self Storage, 5912 66th Street, 806-798-1926. Advantages: Reasonable priced, great manager familiar with the wind program, free boxes, 24 hour access

Disadvantages: As with any other storage area in West Texas, if you don't get an indoor climate controlled unit, be sure to cover your stuff up as it will be very dusty when you return and most likely covered in spiders.

University Storage behind Walgreens at 82nd & University. Manager is very nice and helpful, 24 hr access. Climate/dust control allows you to just throw stuff in there like its sitting in your living room, and pick it up months later without any weird smells.

TRAVEL PROCEDURES

1. Decide when, where, and why ... be sure to have a good case (like presenting a poster or paper) because travel funds are limited and even though the 2nd Annual Meeting of the National Society of Owners of Multiple House Cats is in Vegas this year... well, just be sure you are presenting at the conference.
2. Arrange logistics as far in advance as you possibly can (helps you get a room at the conference hotel instead of one 20 rainy, crime-infested miles away, etc). **Logistics of Airfare, Meals, Lodging, Rental Cars, Personal Auto Mileage, and Registration fees info can be found in the "Plain and Simple Travel Guide for Graduate Students.pdf" file, the website of which is located here in the Files directory. Pay close attention to the rules here, especially regarding rental cars, or you might have to fight for your reimbursement.**
3. Complete the Travel Application form (a copy is attached, many other students have an electronic version and would happy to share, or ask Kelsey to email you one)
4. Submit the form to Kelsey or Patricia Bela as soon as possible (at least 7 days prior to travel) to get authorization.
5. Travel and save receipts. Meal receipts are not necessary to save except for international travel.
6. After travel, call or email Patricia Bela to take your receipts to her with another copy of the Travel Application form you already gave her. This will make your life easier, rest assured.
7. Await reimbursement, which will come by check and is likely to be delivered to the mailbox in the WIND box in the CE building on campus; or just check with Patricia. Reimbursements typically take a maximum of 1 month.

Some funds from WISE are available for you to travel. There are no hard and fast guidelines for dollar amounts for travel, so stay in touch with Kelsey and Dr. Kishor Mehta and be sure to check before putting down any hard cash. Money is available from the Graduate School for travel, and from your advisor if they have a big grant. Ask the Graduate School way ahead (months) of travel time and your advisor first, and then approach Dr. Mehta.

- If you want to piggy-back personal travel with business travel, that is allowed by the travel office and they will still reimburse your entire flight and the portion of your meals and lodging and other expenses that were related to the business part. This is a great way to work and play at the same time.
- Rental cars for TTU employees are available with lavish discounts and privileges. Ask Patricia Bela for a list of phone numbers and booking codes.
- Per Diem rate (Meals and Incidental Expenses -MIE) is determined based on the city you are traveling to. It's usually \$35-\$50 per day, and you can figure out your exact rate using the federal rates website. The link and others are available at the TTU online Travel site:
<https://www.fiscal.ttuhs.edu/Travel/Main/LocalityRates.asp>.
- Personal Auto Mileage reimbursement is (approximately) \$0.55 per mile. Check with Patricia Bela for the most recent rates.
- Some Funds cannot be used for international travel, they must come from elsewhere. If you plan to travel internationally, you also need special permission from the President of the Health Sciences Center (see memo Foreign Travel at <http://www.ttuhs.edu/HSC/OP/OP79/>). Best to stay in U.S.
- If you stay at a hotel in Texas, the room should be tax-free. Patricia Bela can also provide tax exemption codes.

*****Do NOT book anything through Travelocity, Expedia, Orbitz, or other such online booking sites as they do not provide proper receipts. This angers the TTU travel gods and they will deny you reimbursement!*****



Texas Tech University
Wind Science & Engineering Research Center
Leave & Travel Request



This form should be approved and submitted prior to any business-related travel, regardless of funding source.

Name: _____ Location: _____

Dept: _____ Depart date: _____

Circle: IN State OUT of State Foreign Return date: _____

If presenting a research paper or chairing a session, provide title, co-authors and relevant information:

Purpose of travel and how this trip benefit Texas Tech and/or the WISE Research Center:

	Expense Estimate <small>to be provided by traveler or travel coordinator</small>	FOAP <small>to be provided by business manager</small>	Fund Manager <small>to be provided by business manager</small>
Airfare	_____	_____	_____
Car Rental	_____	_____	_____
Taxi, Shuttle	_____	_____	_____
Parking	_____	_____	_____
Personal Car Mileage	_____	_____	_____
Lodging	_____	_____	_____
Registration	_____	_____	_____
Meals	_____	_____	_____
Other	_____	_____	_____
	_____	_____	_____

Employee Signature

Date

Supervisor Approval

Date

Fund Manager Approval

Date

- Completed form should be provided to Travel Coordinator a minimum of one week prior to employee travel to assure reimbursement.
- If 9-month faculty are using TTU accounts to cover summer travel summer, this form should be signed by the department chair and fund manager for audit purposes.

Travel Completed & signed travel application received _____
Coordinator: Travel receipts / expense documents received _____

Entered _____
TV# _____

Reference Guide for Travel Cost Reimbursement for Graduate Students

Please see:

http://www.depts.ttu.edu/gradschool/docs/current/travel_reference_guide_09.pdf

The Graduate School Reference Guide gets updated once in a blue moon, so keep checking the Graduate School website and the link above is the most recent file (June 2009).

Office Space for Graduate Students

While all WISE PhD Students have office space (i.e. desk) available to them out at Reese, there are invariably a few students who have offices on campus. Those students who office on campus receive that privilege because they are working for a professor as a Teaching Assistant (TA) and are paid by that professor; or they are class instructors. Don't whine if you want a campus office and are not a TA. If you do not have transportation out to Reese, you are encouraged to use the main library on campus, next to the Student Union Building. In the library basement, there is the largest computer lab on campus that is available to all students. Find a table, stake a claim, and keep undergrads at bay.

To Get a Study Carrel at the University Library

Faculty, graduate and undergraduate students at Texas Tech University are eligible to reserve individual study carrels in the University Library building (subject to availability) by filling out a form at the Circulation Desk or by filling out the online form. Faculty may reserve carrels for one year with a renewal date of June 1st of each year. Renewals must be made by contacting the Circulation department. Students enrolled in "8000" level courses may keep the carrel as long as enrolled in the course and must renew during the first two weeks of each Fall and Spring semester and the first week of each Summer semester. Students enrolled in "7000" level courses are assigned carrels for one semester. Both graduate and undergraduate students may reserve a carrel for a short period of time to study for tests or work on a research project.

Contact: Claudette Jacobs: (phone) 742-2256 Ext325 (email) Claudette.jacobs@ttu.edu

WHO TO CONTACT

To see grades, register for courses and see schedule

Go to RaiderLink www.raiderlink.ttu.edu

To manage personal info in TTU system and download some free-software per TTU agreements of copyright issues (e.g. Office, TTU MSN, Front Page etc).

Go to Your eraider account www.eraider.ttu.edu

Your computer is broken

Stephen Morse -stephen.m.morse@ttu.edu, 806-742-3476 ext.241, Stephen is spread very thin, so he sometimes doesn't respond to your emails. If you call and he is not in, DO NOT leave a message and expect a return phone call. Hang up and call him back at regular intervals until you get him. Or go see him (on campus in the "wind side" of CE building). He's very nice and will help you when he can. Stopping by his office is the best option for help.

You want to learn about the field site equipment (200m tower, etc)

Jeff Livingston -jeff.livingston@ttu.edu he does respond to email or just go see him at Reese.

Hurricane Deployments

Ian Giammanco -ian.giammanco@ttu.edu or Brian Hirth- brian.hirth@ttu.edu are in charge of the hurricane team.

Travel Reimbursements

Patricia Bela in WISE office- patricia.bela@ttu.edu or 742-3476 ext. 332

Facility Tours

Carol Ann Stanley- Carolann.stanley@ttu.edu, who will contact Jeff Livingston at the Debris Impact Facility and other key parties.

Debris Impact Facility

Kelly Havens k.havens@ttu.edu or Larry Tanner larry.tanner@ttu.edu or 742-3476 ext. 336.

WISE PhD complaints, suggestions, or praise

Kelsey Seger- call anytime 742-3476 x.321, or Kelsey.seger@ttu.edu , or go by her office CE 107. What you say in her office stays in her office. She'll do her best to fix whatever is wrong, or just listen if that's what you want.

Dr. Kishor Mehta- email to make an appointment.

Instructions for Streaming a Seminar to the web

K. Walter, 8.25.2006

Tools required

Video camera with USB streaming capability, USB cable

Laptop computer with Windows Media Encoder 9.0 or greater installed

Tripod

Extension cord

Instructions

1. With enough lead-time before the presentation, email interested parties (Wind distribution list, outside interests) with an announcement of the seminar and the clear announcement that it will be available Live on their desktop by pasting `mms://enterprise.coe.ttu.edu/Wind` into their web browser address bar and pressing "Go", and that they can ask question through you the moderator by emailing you at `youremailaddress@ttu.edu`. Windows Media Player should automatically open with the stream once encoding has begun in the presentation room (~ 10min prior to presentation start).
2. In the seminar room, attach video camera to tripod and set in the center portion of the room closer to the front (speaker) than the back (audience).
3. Connect camera to laptop via USB cable.
4. Turn camera on in the "video record" position and with the Menu-Options-USB Streaming output selected.
5. Zoom and focus camera so that presentation screen essentially occupies the full screen.
6. On the laptop, open Windows Media Encoder 9.0 (hereafter WME).
7. There is a pre-saved session that has all of the appropriate settings for the task at hand, so exit out of the wizard that may automatically open and go to FILE menu and choose the top-most file (i.e. the most recent one used). It should be named "WIND basic setup.wme" or something similar.
8. You will be prompted for a name and password to log onto the server, use:
name: `ttu\eraidername`
password: `eraiderpassword`
at present, only some students are authorized to access the server. In the future others can gain access by contacting Brent Guinn in the College of Engineering Dean's office (742-3451, `brent.guinn@ttu.edu`)
9. Still in WME, go to **View** -Audio Panel, and **View** -Monitor Panel to monitor vital signs of the stream. In the Monitor Panel, the number to watch is the CPU Load under the General tab. This number should not jump above 90% very often. If it does, the output video may not be smooth.
10. At this point, you will not see anything in the Input/Output windows until you choose to "Start Encoding", but everything should be correctly established now to go ahead with that step when the presentation is about to begin (start encoding -10min prior to seminar start time).

11. Press the **START ENCODING** button at your chosen time.
12. When the seminar has ended, press the **STOP ENCODING** button at top and close out of WME.
13. To pull the file from the College of Engineering Server to the laptop (with a final destination hopefully of the WIND server and webpage), click **START** on the laptop and select **MY COMPUTER**. Double-click the "WMArchive on..." drive. Enter **ttu\eraidername** and **eraiderpassword**. The archived presentation video will be in the **Wind** folder. Cut that file from the Wind file and paste it in the location of your choice on your local machine or the WIND server.

Instructions for Opening a Remote Desktop to a Reese/TTU computer from anywhere in the world

1. On your CPU at Reese, go to the **Control Panel, Performance and Maintenance**, and then select the **Remote** tab. Under the "Remote Desktop" area, check the box that says "Allow users to connect remotely to this ..." If you do not have administrative privileges, you will not be able to change these settings, so contact Stephen Morse to get those privileges. In this same area, just under the check box, write down the name of your computer (the text there is something like "COMPUTERNAME.ttu.edu" -mine began with a WNM ...)
2. When you leave Reese, do not shut down or put your CPU on standby, just hit CTRL+ALT+Delete and choose to **Lock** the desktop.
3. Set up a TTU VPN (Virtual Private Network) connection on the computer you wish to *connect from*, like your laptop or home computer. Instructions from TTU IT Help are: <http://www.depts.ttu.edu/ithelpcentral/solutions/VPN/index.php>

For Windows XP:

- a. From the **Start** Menu, open the **Control Panel**. Then choose **Network Connections** and select **Create a new connection**.
- b. The Network Connection Wizard will appear. Click the **Next** button
- c. Choose **Connect to the network at my workplace.**, and click the **Next** button
- d. Choose **Virtual Private Network connection**, and click the **Next** button.
- e. Type **TTUnet** in the name field for this connection.
- f. Choose **Do not dial the initial connection**, and click the **Next** button.
- g. Type **vpn.ttu.edu** in Hostname field, and then click the **Next** button.
- h. If you want this connection to be made available to all users on your network, check **Anyone's use**, otherwise check My use only. Then click the **Next** button
- i. Check the **Add a shortcut to my desktop** if you desire. Click the **finish** button.
- j. In the Connect TTUnet VPN dialog box, **enter your eRaider username** and **eRaider password** and click the **Properties** button
- k. Click on the Security Tab. Select **Typical settings**, **Require secured password**, and **Require data encryption**.
- l. Click on the Networking tab. Set the Type of VPN server to **Point to Point Tunneling Protocol (PPTP)**. Note: Perform the following steps through Step 12 only if you are on a Cable Modem, DSL, or using any other non-Texas Tech

service provider for your commercial Internet service. Otherwise go to Step 13. Select **Internet Protocol** and click on the **Properties** button.

- m. Check **Obtain an IP address automatically** and **Obtain DNS server address automatically**. Click on the **Advanced** button.
- n. Uncheck **Use default gateway on remote network**. Click the **OK** button.
- o. Click the **OK** button.
- p. Click the **OK** button.
- q. Click the **Connect** button. When connected you will see a connection icon in the bottom right-hand corner of your screen

4. Once you have set up your VPN on your laptop or home computer, connect to TTU using that connection.

5. Now, open a Remote Desktop Connection by going to **Start, All Programs, Accessories, Communications, Remote Desktop Connection**

6. In the window that pops up, hit **Options**» to expand the box. For "Computer", type the COMPUTERTNAME you wrote down from your Reese machine. Your username and password is the same as your eRaider account, and the domain is "TTU.net". If you click "Save As...", you can save that info so you don't have to type it in every time. While you're configuring, go over to the **Experience** tab and select your internet connection speed from the dropdown menu.

7. Hit **Connect**, and you should be immediately ported to your Reese desktop, free to work with documents and programs in complete control of your work machine as if you were sitting at your desk.

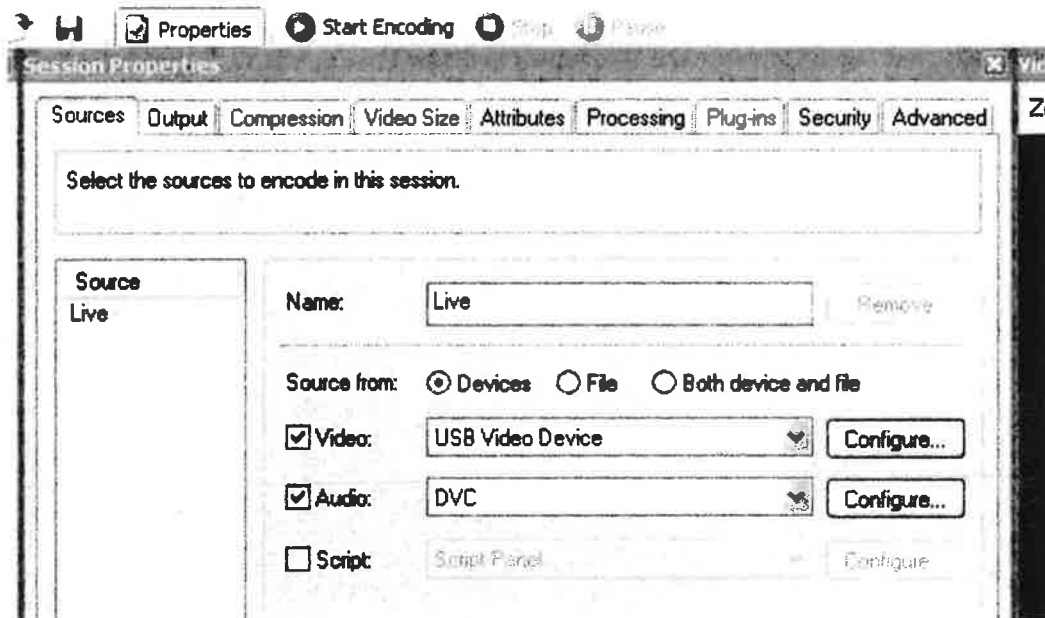
Notes of Interest

- The stream lags real time by about 15 seconds by the time it reaches a remote desktop
- For the highest quality audio and video, use a 3CCD video camera (present model is Panasonic PV-GS 150) and a wireless microphone (spend \$500-\$700 for a good one) on the presenter. College of Engineering uses a Canon XL IS with a high-quality glass lens for their video source.
- Can use Windows Media File Editor (included in WME 9.0 download) to crop ends of archived stream if desired.
- The option is there to archive a file to the local laptop while encoding, but this can severely hinder the CPU performance and thus ability to stream. Always Push to Server only.
- Total stream size (audio and video) is approximately 600 kbps. TTU wireless internet is 11 Mbps, so wireless internet should work fine if the service is not interrupted. If a 100 Mbps land line is available, it will provide greater insurance of no interruptions.
- 600 kbps for the video stream is optimal for size and quality
- 64 kbps 44k hz Stereo is optimal for audio
- 18 fps optimizes file size and image quality, since that is about the lower limit of human interval perception
- 640 x 480 is optimal video size, this is equivalent to full-screen capability
- Do not select "Two-pass encoding" under Properties.

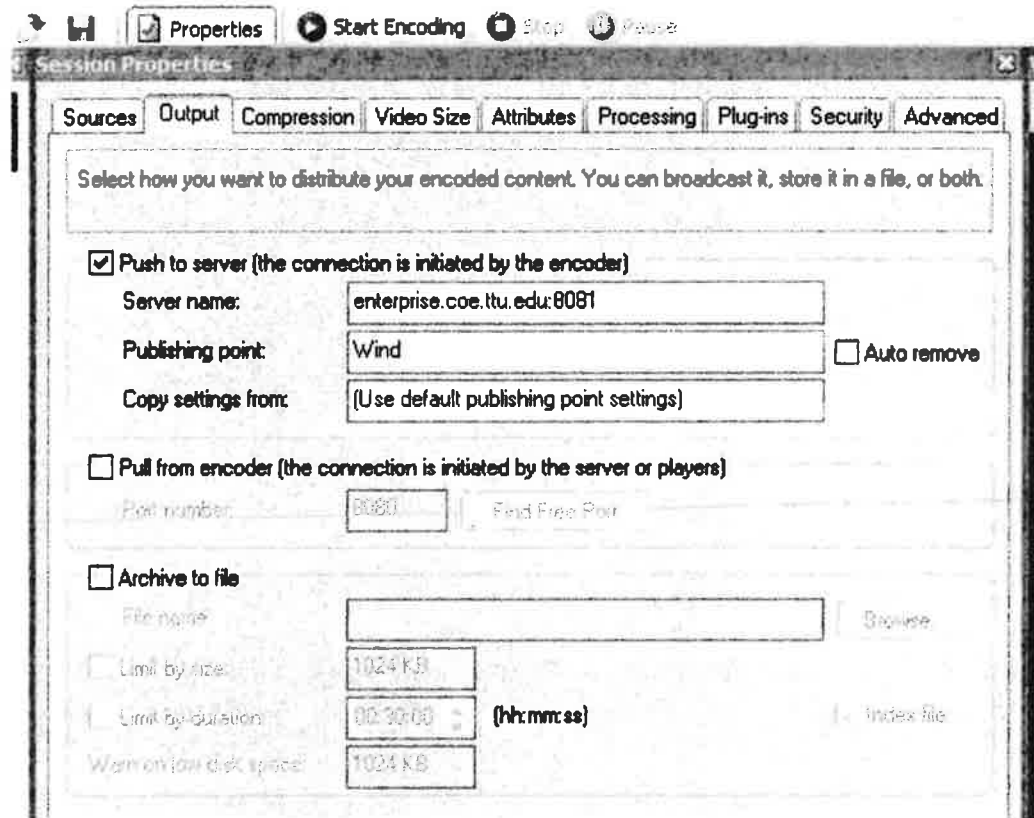
- To provide access to the server multiple Wind people, contact Brent Guinn about creating a local group and editing the roster to include those you wish to have access. He should be able to just give all the new roster members the same permissions as Kevin Walter (kevwalte), however if problems are encountered, the solution to getting kevwalte the correct permissions was "**authentication on the server itself, not the publishing point**".
- The ability is there to stream at multiple compression rates simultaneously to accommodate remote viewers on slower connections. This can severely hamper the local CPU, though, and can also lead remote machines on fast connections to inadvertently select the lower-quality stream. For this reason, use one stream only.
- One can find out the number of remote stream viewer ("players") by calling Brent Guinn prior to the event (742-3451) and asking him to reset the counter, and then calling him again after the event to ask for the number of "players".
- You can map the COE server where our streams are archived by going to Start on the local laptop and right-clicking My Computer and selecting "Map Network Drive...". The drive is Z: and the folder is \\enterprise.cot.ttu.edu\WMArchive

Screen Shots of appropriate setup

"Sources" Properties



"Output" Properties



"Compression - Edit..." Properties

Sources Output **Compression** Video Size Attributes Processing Plug-ins Security Advanced Zoom: 50% Dis

Select the distribution method and encoding settings for your content. The distribution method you select determines the settings that are available.

Destination: (Custom) Edit...

Video: Custom Encoding Settings

Audio: General 673 Kbps

Details:

Audio format: 64 kbps, 44 kHz, stereo CBR

Video size: 640 x 480 Same as video input

Frame rate: 18 fps Key frame interval: 6 sec

Video bit rate: 600K bps

Buffer size: 5 seconds Use default

Video smoothness: 75 (Sharper)

Decoder complexity: Auto

Script bit rate: bps

Total: 673.04 Kbps (673048 bps)

Video bit rate: 600 Kbps Audio bit rate: 64.04 Kbps

Script bit rate: Overhead: 9 Kbps

Two-pass

GRADUATES

A few people have made it out alive so far ... they'd probably be more than happy to help you out should you ever need it.

Am Womble

Currently: Instructor, Wind Engineering TTU

JAWomble@aol.com

Area of interest: damage assessment, structural engineering

Apoorv Dabral

Currently: Eqecat, San Francisco, CA

ADabral@eqecat.com

Area of interest: civil engineering, particularly metal-frame structures

Hector Cruzado

Currently: CE Department, Polytechnic University of Puerto Rico (PUPR)

Email: hcruzado@pupr.edu

Area of interest: pole structures (traffic signals), wind tunnel modeling

Kevin Walter

Currently: Trade Wind Energy, Overland Park, KS

Phone: 913-424-5308

Area of interest: wind power (atmospheric science)

Dennis Noll

Currently: Black and Veatch, Kansas City, KS

Dennis.d.noll@gmail.com

Area of interest: Renewable Energy resource assessment

Brandon Storm

Currently: EAPC, Grand Forks, ND

Bstorm81@yahoo.com

Area of interest: wind energy analyst

Rolando Vega

Currently: ABS Consulting, San Antonio, TX

rolveg@yahoo.com

Area of interest: extreme loads and structural risk

Andrea Gamret-Jackman

Currently: FEMA & IBM, Fairfax, VA

Andrea.jackman@gmail.com

Area of interest: hazard mitigation

Maribel Martinez

Currently: Office of Emergency Management for Amarillo, Potter, and Randall Counties

Maribel.martinez@amarillo.gov

Area of interest: economic impacts of tornados

Rebecca Paulsen-Edwards

Currently: Assistant Professor, Physics at Southwestern University, Georgetown, TX

bpaulsenedwards@gmail.com

Area of Interest: The Effect of Geographic Features on the Wind Field in Landfalling Hurricanes

Anita Schiller

Currently: Instructor, Texas Tech University, Lubbock, TX

Anita.schiller@ttu.edu

Area of Interest: economic impact of hurricanes

Brian Zachry

Currently: AIR Worldwide, research scientist, Boston, MA

bzachry@AIR-WORLDWIDE.com

Area of Interest: wind-wave interaction in near-shore environment

Frank Lombardo

Currently: NIST, Germantown, MD

Frank.lombardo@nist.gov

Area of Interest: thunderstorm wind effects on bluff bodies

Kirsten Orwig

Currently: NREL, Fort Collins, CO

Kirsten.orwig@nrel.gov

Area of Interest: strong winds from a time varying perspective

Tanya Brown

Currently: Institute for Business and Home Safety Research Lab, Richburg, SC

tbrown@ibhs.org

Area of Interest: windstorm damage assessment using aerial and satellite images

Ian Giammanco

Currently: Instructor, Texas Tech University, Lubbock, TX

Ian.giammanco@ttu.edu

Area of Interest: observations of tropical low-level wind maxima towards a predictive statistical model