



Section 1: General Information

George Ward, Executive Director
Office: (859)231-8324
Cell: (859)221-4122
Email: george.ward@uky.edu
Coldstream Research Campus
1500 Bull Lea Rd., Suite100
Lexington, KY 40511

Tanya Floyd, Leasing and Operations Manager
Office: (859)218-6563
Cell: (859)338-9390
Fax: (859)257-2489
Email: tanya.floyd@uky.edu
A152 ASTeCC Building
Lexington, KY 40506-0286

Larry Farmer, Materials Coordinator
Office: (859)218-6519
Cell: (859)684-5570
Fax: (859)257-2489
Email: lfarm2@uky.edu
A033C ASTeCC Building
Lexington, KY 40506-0286

Website: www.research.uky.edu/ASTECC

Emergency Numbers:
University of Kentucky Police (859)257-UKPD (8573)

Environmental Health and Safety
Phone: (859) 257- 3845
Fax: (859) 257- 8787
Website: <http://ehs.uky.edu/>

Advisory Board

George Ward, Executive Director, Coldstream Research Campus
Warren Nash, Director, ICC
Frances Stokes, CPA, KTI
Jim Conner, Project Management, Coldstream Research Campus
Tanya Floyd, ASTeCC

Hours of Operation

Office hours at the Advanced Science and Technology Commercialization Center (ASTeCC) are from 8:00 am to 5:00 pm, Monday through Friday. Each person needing access to areas of ASTeCC, will need to complete an authorization form to obtain a security entry code. The doors between ASTeCC and McVey are programmed with security entry codes maybe be used to enter the building after regular business.

The Advanced Science and Technology Commercialization Center (ASTeCC) will abide by the University of Kentucky holiday schedule for closure of business hours.

Getting Started

It is our goal to make your transition into the Advanced Science and Technology Commercialization Center as smooth as possible. Therefore, we have prepared a brief checklist of items that you will need to take into consideration when moving in. Unless otherwise noted, the list below represents initial move-in criteria.

_____ Lease / Initial Payment

All security deposits and lease payments must be made prior to occupancy. All lease payments are to be paid to Kentucky Technology Incorporated and mailed to the below address:

Kentucky Technology Incorporated
c/o Francis Stokes
Coldstream Research Campus
1500 Bull Lea Rd., Suite100
Lexington, KY 40511

_____ Limited Liability Insurance Certificate must be submitted prior to occupancy.

_____ Access Entry Codes

You may obtain an Access Code form in room A152. The form should be completed and submitted to Tanya Floyd. Please indicate all areas that you should have access and please have your supervisor's approval signature before submitting.

_____ Internet / Telephones

You may request internet and communication service to your lab or office. Please provide the number of ports and telephones that you will need activated. If you are a start-up company, please provide the name and address of the contact person who will be responsible for processing this expense.

_____ Website Information

The Advanced Science and Technology Commercialization Center website (www.research.uky.edu/ASTECC/) contains a directory with each tenant company and provides a hot link to their website (if available). You will need to submit your company's URL information on your initial application.

Section 2: Program Overview

ASTeCC

Purpose:

ASTeCC is the University of Kentucky's showplace for multidisciplinary research, technology transfer, and new business start-ups. The ASTeCC program provides an exciting opportunity for UK to combine a research facility where fundamental discoveries are made and a commercialization center where these discoveries become products in the marketplace. ASTeCC combines the experience of scientists and engineers from various disciplines to encourage high-quality, collaborative research of intellectual and commercial value.

Mission:

The mission of the ASTeCC program is to create an entrepreneurial ecosystem that encourages early-stage, high-technological, start-up company growth that will lead to economic development opportunities for the Commonwealth.

Overview:

The University of Kentucky is a premier research institution and, as such, is a source of outstanding technologies in a variety of disciplines. Through commercialization of these technologies, the ASTeCC program can provide new synergy for technology-based economic development in Kentucky. In addition, ASTeCC can provide our faculty and students with the opportunity to benefit from the commercialization of their research, keeping the University of Kentucky competitive with other world-class research institutions for the very best talent. ASTeCC will also be attractive to many established firms as a source of new technologies complementary to their primary markets. It will also expand the pool of employment opportunities for student, alumni and other members of the University community.

The ASTeCC program is predicated on the following:

- Conduct high-quality research in interdisciplinary fields
- Transfer technology from UK to the private sector
- Provide financial incentive for entrepreneurial faculty that will enable them to remain on the faculty while pursuing their business interests.
- Enhance the income stream for the university
- Facilitate economic development

The ASTeCC program will follow these steps:

Screening and Selection – Prospective companies will be screened by the ASTeCC Space Committee / Advisory Committee.

Business Assessment – Once accepted, milestones will be set through an assessment of the business plan. The ASTeCC Space Committee / Advisory Committee will complete the assessment with input from other pertinent providers.

Milestones – The milestones set will vary by company and business plan and will be established to measure progress in some or all of the following areas:

- Business Plan Issues
- IP Issues
- Technology Issues
- Market Issues
- Management Issues
- Capital Issues

Movement – The ASTeCC Program staff will regularly monitor progress against milestones to ensure movement through the incubation process.

Mentoring, Consulting, Professionals, and Interns – Companies will be put in contact with mentoring support and other external resources to assist in their development. Interns will be screened through ICC and/or UK and placed with companies as needed.

Graduation – Prior to its acceptance in the program, an expectation of the founder's role in the company and the company's expected tenure in ASTeCC facilities will be established for each company. For example, a software company might be expected to spend 24 months in the program, and an instrumentation company approximately 3 years and biotech company 5 years or longer.

Program Entrance

Scope:

1. To provide a program of services for growing businesses formed on the basis of a technology that relates to University of Kentucky research programs or research services.
2. To bring ASTeCC companies to the stage where they can attract sufficient seed capital to eliminate need for subsidy and assure company growth.

The ASTeCC Program can provide:

- Access to professional services.
- Access to office services.
- Access to University of Kentucky services.
- Evaluation of initial plan and potential; periodic evaluation of progress.
- Continuation or expansion of services to ASTeCC graduates and other Coldstream Research Campus companies.

The ASTeCC program will screen program participation of the basis of the following requirements: The Company

- A early start-up and a small business under SBA guidelines, or a spin-off of a company having a research relationship with the University of Kentucky.
- Has a technical / scientific orientation with significant commercial potential as a Kentucky employer.
- In the pre-venture capital stage of development or has an identified need for ASTeCC services.
- Has a written business plan, or the ability to produce a 12-month strategic plan outline and schedule of assumptions within the first 90 days in the program.
- Is related to the University of Kentucky research, research services, research center, students, staff, or faculty; or has a strong potential for creating such a relationship within 6 months.
- Has a qualified source of objective independent analysis regarding the existence of probable markets and demand.
- The principals involved possess education, experience and backgrounds reasonably related to the business concepts involved.
- Has the ability to pay for ASTeCC program services at the rates required.

The objectives for the ASTeCC program are to help a company:

- Access technologies and markets
- Achieve business plan milestones

- Achieve effective business management capability
- Identify potential corporate partners
- Identify potential sources for capital
- Secure financial backing

ASTeCC Facility Services

Tenants and affiliates may utilize any or all of the following ASTeCC services subject to approval of the university and the payment of appropriate fees where required.

- Reduced rent for space and furnishings (tenants only)
- University telecommunications
- Laboratory / office space
- Casework and fume hoods
- Cold room
- Shared laboratory equipment
- Printing and copying
- Phone and fax
- Computer access
- Conference rooms
- Mail and package handling
- Notary Public services
- Kitchen / Dining area with refrigerator
- Loading dock with adjustable height ramp
- Audiovisual equipment
- Materials and equipment acquisition
- Excellent proximity to campus
- Building security
- University chemical stores purchasing
- Fee-based Shared Cell Lab
- Fee-based Shared Equipment Lab
- Fee-based Autoclave
- Fee-based access to university shops and facilities
- Fee-based access to university research equipment
- Fee-based access to hazardous material disposal (tenants only)
- Access to the University's Library
- Janitorial services

Policies and Standard of Procedures – ASTeCC

(ASTeCC Policy Guide – Revised 03/14)

The Advanced Science and Technology Commercialization Center exists to advance the strategic plan of the University and to facilitate the work of the occupants. We strive to keep it a safe and secure environment that is well run to achieve those goals.

It is hoped that the following information will be of assistance to you and that this information will help us maintain a uniform policy for the operation of the units in ASTeCC.

A. General Information

Because non-University visitors will frequently visit ASTeCC and because independent for-profit entities are operating in ASTeCC, it is important to maintain a professional coordinated appearance for office and laboratory furnishings. No furniture or furnishings (including photographs and posters) will be allowed that detract from the appearance of the building. No photographs or other items may be placed on the walls in common areas without approval of the Facility Planner.

Bulletin boards are provided for display of information about activities in the various units as well as recent publications. Occupants are encouraged to use this means of communicating their interests and areas of research to others.

All offices and laboratories must be kept free of clutter at all times. Trash, boxes, etc, cannot block hallways or doorways. Trash that is not removed by the custodial staff within 24 hours should be reported to the Facility Planner. No animals (other than authorized research subjects), bicycles or other vehicles shall be allowed in the halls, corridors, elevators, or elsewhere in the building.

No modifications or changes of any kind that affect the appearance of offices and laboratories may be made except with the approval of the Facility Planner.

Faculty members should immediately notify the business manager in their respective departments of any equipment that is being moved into the ASTeCC Building and ask the business manager to update the equipment inventory list. This will assure that insurance coverage will be maintained in the event of any damage and/or theft. Private businesses will be responsible for their own insurance coverage.

Two phones will be issued to each occupant (one for an office and one for a laboratory). The faculty or business occupant will be billed for all long distance calls made and a monthly user fee (this fee will fluctuate depending on the number of phones in use in the building). Arrangements for additional phones can be made with Communication Services. Occupants will be responsible for all charges for any additional phones.

Each faculty or business occupant will be assigned an account number for the copy machine and the fax machine upon request. Both machines are located in A153. Mailboxes are located in Room A153A. Outgoing mail may also be left in

Room A153A for pickup by the University Post Office. Mail is usually picked by 10:00 AM each day and goes into circulation that day. In addition, mail will be taken to the UK Post Office each day around 2:30 PM. All off-campus mail must have an appropriate postal meter card attached or the correct postage affixed.

The Facility Planner in (Room A152) will approve requests for keys/access codes. Each faculty member must complete an information sheet for each student or staff member who will be associated with a laboratory in ASTeCC before keys/access codes will be issued.

It is required that each PI makes sure that a check-out sheet is completed by each individual when they are no longer associated with his/her group. The completed form should be turned in to the Facility Planner (Room A152).

All offices and laboratories must be kept locked when not occupied. We do not grant access to offices in ASTeCC to anyone unless we have approval from the occupant. If you want to authorize access to your office by others please notify the Facility Planner by email or voice message.

The water closets, wash basins, sinks, and other apparatus shall not be used for any purpose other than those for which they are constructed. And no sweepings, rubbish, or other substance shall not be thrown therein nor shall anything be thrown out of the windows, doors, or other openings.

The floors, skylights, and windows that reflect or admit light into the corridors or passageways or to any place in said building shall not be covered or obstructed.

B. Safety-Related Issues

All occupants are expected to review and understand the University of Kentucky's laboratory safety procedures and chemical hygiene plan. All faculty, students and employees who work in a laboratory must complete the UK Laboratory Safety Training. All faculty, students and employees must review and understand the ASTeCC Building Emergency Action Plan. All faculty and business clients must send all organizational changes to the Facility Planner to ensure that the Building Emergency Action Plan roster is updated with the most current information. You may find the all of the above information and links at www.uky.edu.

It is required to report all incidents to that involve personal or university owned missing items, unsecured doors and windows, water and chemical spills, fires, injuries, damage, unauthorized individuals in labs or office areas must be reported to the Facility Planner at (859)218-6563 and after business hours you may reach the Facility Planner at (859)338-9390.

OSHA compliance will be strictly enforced. All occupants are required to maintain an updated chemical inventory. All occupants are asked to send an undated chemical inventory list to the Facility Planner.

ASTeCC has a chemical storage area in the loading platform area. Please see the Materials Coordinator in Room A033C if your laboratory needs to utilize space in this area.

Smoking is prohibited at the University of Kentucky.

No additional locks, hooks, or attachments shall be placed on any door or window of the building.

C. Intellectual Property Considerations

ASTECC is engaged in the exciting prospect of transferring technology from the University to the private sector, and it is appropriate to set forth the conditions that the university and private business entity employees need to observe in the operation of their private business entity space and if appropriate, their faculty research space.

The University has promulgated a Governing Regulation (GR XIV) entitled "Ethical Principles and Code of Conduct" and an Administrative Regulation governing Intellectual Property (AR 7:6). Faculty and staff are expected to read, understand, and abide by the conditions of both regulations, which are available on the UK web page. At the heart of these policies is the notion that University members will act in the best interest of the University, and that faculty and staff will, as a condition of their employment, not only assign their interest in intellectual property to the University but will also act to protect the University's intellectual property rights. This expectation suggests that the faculty that have a business operating in ASTeCC as well as an office and/or research laboratory elsewhere on campus will abide by the following understandings. These understandings are consistent with the goal of protecting the University's intellectual property rights and represents rules to which all lessees in ASTeCC must subscribe.

1. Neither the lessee nor a faculty member is authorized to sublease space in ASTeCC without express written approval of the ASTeCC Facilities Planner and KTI.
2. Work performed in for-profit businesses in ASTeCC shall be consistent with and limited to the business plan filed with the ASTeCC office.
3. In order to protect the University's intellectual property, there must be a strict separation of the work or research activities of employees in the private business entities and the work or research activities of employees and students of the University.
4. Employees of the private business entities in ASTeCC can also be University personnel. The phrase "University personnel" includes all faculty and staff, undergraduate students, graduate students, University-employed postdoctoral scholars, visiting scholars, research associates, technicians, and anyone in a comparable University position. However, the following conditions must be met:
 - undergraduate or graduate student employees cannot be enrolled in a course taught by a faculty member who is an owner or plays a significant role in the private business entity or in a degree program where the faculty member would have the possibility of influencing degree completion.
 - graduate student employees cannot exceed the maximum hours for outside work recommended by the Director of Graduate Studies (i.e., hours worked in ASTeCC and elsewhere at the University will count toward the maximum permitted hourly total) see "Additional Employment" at this link - <http://www.research.uky.edu/gs/StudentFunding/tarainfo.html>;
 - In order to preserve the academic focus of graduate students who are on full-time assistantships and have their tuition paid by the University, the Graduate School does not allow for additional salary or employment.
 - postdoctoral scholars, whose goal it is to stimulate their academic careers by conducting publishable research, must not work on non-publishable proprietary research. Postdoctoral fellows are responsible for fulfilling the requirements of their fellowship.; and
 - University personnel should not exceed permitted consulting and other overload hours, see AR 3:9.
5. Employees of the private business entities in ASTeCC cannot perform any work in University space unless there is a written agreement covering this work and payment for the University services is made.

6. Employees of the private business entities in ASTeCC cannot perform any work on any University projects, contracts, or grants in their private business entity space in ASTeCC without prior written approval from the Director of the Office of Sponsored Projects Administration.
7. Ideas, inventions, and discoveries made in the University setting by the faculty member or other University personnel shall be disclosed, according to University regulations, to the Intellectual Properties Committee and cannot under any circumstances be transmitted directly from the University personnel to a private business entity in ASTeCC or elsewhere.
8. University equipment cannot be moved into space leased to private business entities. Equipment owned by the private business entity in ASTeCC cannot be housed or operated in University space without the prior written approval of the Vice President for Research.
9. University personnel should also be certain they have reviewed and are thoroughly familiar with the University's policy on conflict of interest/financial disclosure found in AR 7:2 and 7:9 as well as the policy on consulting and other overload employment, found in AR 3:9.
10. Private business entities in the ASTeCC Building may not use the name of the University, other than in their mailing address, nor use the UK logo in any way associated with their activities.

12/09/13

Criteria for Faculty Researcher and Start-Up Company Space Occupancy in ASTeCC

Each Faculty Researcher within Advanced Science and Technology Center for Commercialization (ASTeCC) must agree to follow his / her commitment of the Memorandum of Understanding in order to continue occupancy of their ASTeCC lab and / or office. The commitment for ASTeCC space will have a 3-year renewable term and renewal of this agreement will be contingent upon the following criteria:

1. Progress toward commercialization of some aspect of research as demonstrated by disclosures, patents, and sponsored research funding and business activity.
2. Submittal of an annual progress report due (August 15th).
3. Participation in interdisciplinary activities of the ASTeCC Center.
4. Maintaining and / or growing research funding for activities conducted in ASTeCC and properly documenting Enhancement funds from these grants for the ASTeCC Facility.

If additional space is needed in response to program expansion, the Dean of the academic department will make the request to the Space Committee. No guarantees of additional ASTeCC space are implied by the memorandum.

To ensure that the ASTeCC Program and Facility are utilized appropriately, the commitments listed above will be enforced according to the terms of Memorandum of Understanding

Each start-up company prospect must agree to the terms of his / her lease with the Kentucky Technology Incorporated in order to continue occupancy of their ASTeCC lab and / or office. The commitment for ASTeCC space will have a 3-year renewable term and renewal of this agreement will be contingent upon the following criteria:

1. The ASTeCC prospects must be either:
 - A new or early-stage technology based business.
 - A spin-off of an existing business.
 - A business seeking to move to Lexington, Kentucky.
2. The prospect must have a legally formed business.
3. The prospect must have adequate funding resources.
4. The prospect must agree to comply with the entire lease agreement between the Lessor, Kentucky Technology Incorporated and the Lessee.

5. If chosen to participate in the ASTeCC Program, the tenant must meet the ASTeCC Program benchmarks towards graduation.

To ensure that the ASTeCC Program and Facility are utilized appropriately, the commitments listed above will be enforced according to the terms of KTI Lease Agreement.

University of Kentucky
Advanced Science and Technology Center for Commercialization
Policy for Faculty Researcher Space Occupation

The Space Committee for the Advanced Science and Technology Center for Commercialization makes the decision about space utilization within ASTeCC. All space in ASTeCC is to be utilized for the progress and benefit of the ASTeCC Program and to support the ASTeCC Mission Statement.

ASTeCC Mission Statement

The mission of the ASTeCC program is to create an entrepreneurial ecosystem that encourages early-stage, high-technological, start-up company growth that will lead to economic development opportunities for the Commonwealth.

Each Faculty Researcher within ASTeCC must agree to follow his / her commitment of the Memorandum of Understanding in order to continue occupancy of their ASTeCC lab and / or office. The commitment for ASTeCC space will have a 3-year renewable term and renewal of this agreement will be contingent upon the following criteria:

1. Progress toward commercialization of some aspect of research as demonstrated by disclosures, patents, and sponsored research funding and business activity.
2. Submittal of an annual progress report due (August 15th).
3. Participation in interdisciplinary activities of the ASTeCC Center.
4. Maintaining and / or growing research funding for activities conducted in ASTeCC and properly documenting Enhancement funds from these grants for the ASTeCC Facility.

If additional space is needed in response to program expansion, the Dean of the academic department will make the request to the Space Committee. No guarantees of additional ASTeCC space are implied by the memorandum.

To ensure that the ASTeCC Program and Facility are utilized appropriately, the commitments listed above will be enforced according to the terms of Memorandum of Understanding.

Advanced Science and Technology Center for Commercialization Entrance Criteria for Private Start-Up Companies

The Space Committee for the Advanced Science and Technology Center for Commercialization makes the decision about space utilization within ASTeCC. All space in ASTeCC is to be utilized for the progress and benefit of the ASTeCC Program and to support the ASTeCC Mission Statement.

ASTeCC Mission Statement

The mission of the ASTeCC program is to create an entrepreneurial ecosystem that encourages early-stage, high-technological, start-up company growth that will lead to economic development opportunities for the Commonwealth.

1. The ASTeCC prospects must be either:
 - A new or early-stage technology based business.
 - A spin-off of an existing business.
 - A business seeking to move to Lexington, Kentucky.
2. The prospect must have a legally formed business.
3. The prospect must have adequate funding resources.
4. The prospect must agree to comply with the entire lease agreement between the Lessor, Kentucky Technology Incorporated and the Lessee.
5. If chosen to participate in the ASTeCC Program, the tenant must meet the ASTeCC Program benchmarks towards graduation.

To ensure that the ASTeCC Program and Facility are utilized appropriately, the commitments listed above will be enforced and non-compliance of the Lease Agreement commitments will result in the occupants' separation from the ASTeCC Program and Facility. The Space Committee must optimize the utilization of ASTeCC space and assets.

Facility Permitted Uses

1. The Demised Premises shall only be used for:
 - a. Laboratories, offices, and other facilities for research, basic, developmental and applied, and consulting, conducted by or for any individual, organization, or concern, whether public or private.
 - b. Product manufacture or assembly shall be restricted to the manufacture or assembly of technology products which are clearly related to the on-site research and development activities of the tenant, or to manufacturing processes which require high levels of scientific or technological input.
 - c. Pilot plants and test or research facilities in which processes planned for use in production elsewhere can be tested.
 - d. Incidental operations required to maintain or support any permitted use, on the same tract as the permitted use, such as maintenance shops, parking garages, keeping of animals, experimental plots, machine shops, and communications or computer facilities.
 - e. Services which the University, in its sole discretion, deems necessary to assist those uses permitted in paragraphs 1 through 3 above including, but not limited to, accounting, legal, printing, research, day-care, travel planning, and mailing centers. However, such services are to remain ancillary to the primary purpose of the Coldstream Research Campus as discussed above.
2. Outside storage (including, without limitation, all motor vehicles such as trucks or trailers) is prohibited without Landlord's prior written consent. Tenant shall at its own cost and expense obtain any and all licenses and permits necessary for its use of the Demised Premises.
3. Tenant shall comply with all governmental laws, ordinances, regulations, rules, orders and directives (collectively, "regulations"), including (without limitation) all environmental, energy and zoning regulations, and to any restrictive covenants and rules and regulations of the Coldstream Research Campus. Tenant at its sole expense shall promptly comply with all regulations for the correction, prevention and abatement of nuisances in, upon, or connected with the Demised Premises.
4. Tenant shall not permit any objectionable, unpleasant or dangerous odors, smoke, dust, gas, emission, noise or vibrations to emanate from the Demised Premises, nor permit any activity upon the Demised Premises which would constitute a nuisance or would disturb or endanger any other tenant of the Park.
5. Without Landlord's prior written consent, Tenant shall not receive, store or otherwise handle any product, material or merchandise which is explosive or highly inflammable or which has been listed by EPA as being an actual or suspected carcinogen. Tenant shall not permit the Demised Premises to be used in any manner which would render the insurance thereon void or in the judgment of the insurer make the insurance risk more hazardous than previously (causing an

increase in premiums) or cause the State Board of Insurance or other insurance authority to disallow any sprinkler credits.

Management Safety

All clients of ASTeCC will review and follow all university guidelines and policies to ensure compliancy throughout the ASTeCC Program.

You may visit the following website for all university policies on lab safety, severe weather, hazardous waste management and safety, reporting accidents, bomb threats, and safety training schedules **www.ehs.uky.edu/welcome.html**

We follow the University of Kentucky severe storm and disaster plan. You may find the safest area of the ASTeCC Building by checking the following website link: <http://www.gwx.ca.uky.edu/stormready/safeplaces.shtml?286>

ASTeCC BEAP Plan –

College/Department	Acronym	Description	Web Address	Rates	Contact	Phone
Advanced Genetic Technologies Center	AGTC	High-throughput genetic analysis, potential to enhance visibility of UK in the modern genomics world while providing a nucleus to integrate biological research entities throughout the institution itself.	http://www.uky.edu/Centers/AGTC/	Varies	Christopher L. Schardi	257-7445 x80730
Agricultural Experiment Station		Addresses problems of agribusiness, consumers, international trade, food processing, nutrition, community development, soil and water resources, and the environment.	http://www.ca.uky.edu/research/research_main.htm	Varies	Nancy M. Cox	257-3333
Biostatistics Consulting Unit	BCU	Provides a broad array of biostatistical and epidemiological consulting services.	www.mc.uky.edu/kysph/bcu/	Varies	Richard J. Kryscio	257-4064
Bone Diagnostic and Research Laboratory			www.mc.uky.edu/nephrology/bone%20lab.asp	Varies	Marie-Claude Monier-Faugere	323-5384
Cord Blood Bank	CBB	Provides human umbilical cord blood cells, either fresh or cryopreserved, for laboratory studies.	www.research.uky.edu/cordblood	\$120 (Fresh) \$225 (Cryopreserved)	Gary Van Zant	323-5719
Division of Regulatory Services		Assures the citizens of the commonwealth that many of the agricultural and consumer products they buy are as they are represented on the label.	www.uky.edu/Ag/RegulatoryServices	Varies	Tony Benge	323-2785 ext. 232
Electron Microscopy Facility		Provides access to cutting edge Materials Characterization equipment.	www.engr.uky.edu/~bjhinds/facil/emf	Varies	Dr. Alan Dozier (TEM) Larry Rice (SEM)	257-2300 ext. 295 257-2300 ext. 275
Equine Parentage Verification and Research Laboratory	EPVRL	Offers a variety of services to horse owners and individual breed registries. One of the top three blood typing labs in the world.	www.uky.edu/Agriculture/VetScience/textpages/epvrl.HTM	Varies	Dr. E. Gus Cothran	257-3777
Environmental Health and Safety	EH&S	Offers Asbestos Testing and Abatement, Environmental Protection, Hazardous Waste Pickup, Occupational Health and Safety, Radiation Safety, Fire Protection and Life Safety	ehs.uky.edu/welcome.html	Varies	David Hibbard	257-3845
Flow Cytometry Core Facility		Offers a Cytomation MoFlo cell sorter with three lasers and high-speed cell sorting capability, and a Becton-Dickinson	www.mc.uky.edu/microbiology/flowcytometry.asp	Varies	Donald A. Cohen	323-5131

		FacsCalibur cell analyzer.				
Imaging Facility		Consists of a central preparatory laboratory, photographic darkrooms, an ultrastructural sectioning room, individual rooms for laser scanning confocal microscopy, transmission electron microscopy, and a PC workstation.	www.mc.uky.edu/shar-edresource/electron	Varies with microscope	Mary Gail Engle	323-6108
Kentucky Cancer Registry	KCR	Formal quality assurance program, complete death clearance follow back, and staff to see that all cases of cancer are systematically reported by non-hospital facilities.	www.kcr.uky.edu	Varies	Tom Tucker	219-0773 ext. 225
Mass Spectrometry Facility	UKMSF	Mass spectrometers, sample introduction, ionization, mass measurement, isolation of natural products, analysis of pharmaceuticals and their metabolites, characterization of peptides, proteins, oligonucleotides, complex lipids, and carbohydrates, as well as synthetic polymers.	http://www.research.uky.edu/ukmsf/index.html	Varies	Dr. Bert Lynn	257-2300 ext. 287
Microarray Core Facility		Affymetrix GeneChip, Custom cDNA Arrays, Bioinformatics, Microarray Facility Pilot Program	http://www2.mc.uky.edu/UKMicroArray/	Varies	Dr. Kuey-Chu Chen	323-6241
Mid-South Cancer Information Service	CIS	Information Service (1-800-4-CANCER), Partnership Program, CIS Research Activities	http://www2.kcr.uky.edu/cis/	Varies	Doug Wagner	219-9063
Nuclear Magnetic Resonance Facility	NMR	Two Varian Gemini 200 MHz NMR Spectrometers, Two Varian INOVA 400's, Varian INOVA 600	http://www.chem.uky.edu/resources/nmr/welcome.html	Varies	John Layton	257-1183
Orthopaedic Biomechanics Consulting Unit		Two Instron servo-hydraulic mechanical testing systems provide compression, tension, bending and torsional testing capabilities of hard and soft tissue and a variety of prosthetic devices.	http://www.uky.edu/RGS/CBME/CBME_research/laboratories.htm#OBMECH	Varies	Dr. Pienkowski	

Transgenic Mouse Facility		Nikon Diaphot TMD microscope with Hoffman modulation contrast optic system, two Narashige micromanipulators used for surgical procedures, de Fonbrune-type microforge, Narashige pipette grinder, Narashige pneumatic microinjector.	http://www.uky.edu/~magree00/	Varies	Brett Spear	257-5167
Gluck Equine Research Center	GERC	A modern equine research facility containing spacious, well-equipped laboratories and animal care facilities, as well as the John A. Morris Library, which maintains collections of veterinary and equine literature.	http://www.uky.edu/Agriculture/VetScience/textpages/gluck.htm			257-4757
Kentucky Tobacco Research and Development Center	KTRDC	Conducts and supports research to facilitate the development of new crop-based business technologies for Kentucky agriculture.	http://www.uky.edu/KTRDC/		Dr. Indu Maiti	257-3296
Livestock Disease Diagnostic Center	LDDC	Full-service animal health diagnostic facility, which identifies infectious diseases and performs tests that safeguard the health of Kentucky's animal population. It also maintains an early-warning system to alert owners to impending epidemics.	http://ces.ca.uky.edu/lddc/	Varies	Dr. Lenn Harrison	253-0571
Center for Aluminum Technology	CAT	Supports and conducts research and development, provides technical assistance to the aluminum industry, assists with training and retaining an educated workforce, and promotes and participates in the expanding use of aluminum.	http://www.engr.uky.edu/cat/		Dr. Subodh K. Das	514-4989 Ext 300
Center for Manufacturing	UKCM	Technology transfer center that specializes in high-quality services for manufacturers. Offers a variety of programs in manufacturing education, research, and technical assistance.	http://www.mfg.uky.edu/		Dr. Lawrence E. Holloway	257-6262

Kentucky Transportation Center	KTC	Conducts research in construction, geotechnology, pavements and materials, intelligent transportation systems, traffic safety, policy and systems analysis, and environment analysis.	http://www.ktc.uky.edu/		Paul E. Toussaint	257-4513
Painting Technology Consortium	PTC	Conducts research in paint spraying and transfer efficiency, paint overspray capturing, paint curing and drying, painted surface finish monitoring and control, paint-related waste recycling and disposal, smart paint material.	http://ptc.engr.uky.edu/		Dr. Kozo Saito	257-6336 ext. 80639
Center for Pharmaceutical Science and Technology	CPST	Capacity to develop and manufacture solid dosage forms, semi-solid dosage forms, and solutions for safety/toxicity studies as well as those for Phase I and early Phase II clinical studies.	http://cpst.uky.edu/			257-5288
Center for Sensor Technology	CenSeT	Focused on the development and use of state-of-the-art sensor techniques for in vivo studies of brain function. Plans include the development and refinement of sensors to measure dopamine, norepinephrine, serotonin, glutamate, acetylcholine, GABA, and nitric oxide.	http://www2.mc.uky.edu/censet/		Greg Gerhardt	323-4531
Center for Structural Biology	CSB	Studies the structures and interactions of biologically important macromolecules using X-ray crystallography, NMR spectroscopy, computation, and modern molecular biology.	http://www2.mc.uky.edu/Structuralbiology/		Carol Beach	257-4475
Center of Membrane Sciences	CMS	Supports research on biological and synthetic membranes and their interface by offering research equipment and facilities for the fabrication and characterization of a new generation of membranes.	http://www.uky.edu/RGS/Membrane/		D. Allan Butterfield	257-5875

Center on Drug and Alcohol Research	CDAR	Conducts research into the biological, psychological, sociopolitical, and clinical aspects of substance abuse. The multidisciplinary center also provides consultation services to public agencies and state and local government.	http://cdar.uky.edu/			257-2355
Gill Heart Institute	GHI	Provides comprehensive services in cardiology, pediatric cardiology, and cardiovascular and thoracic surgery.	http://www2.mc.uky.edu/ghi/		Jessica Ragland	323-4933 x81390
Graduate Center for Biomedical Engineering		CBME offers M.S and Ph.D. programs in biomedical engineering, providing applied and basic research opportunities in a variety of areas from biomaterials to biomechanics and neural controls.	http://www.ukhealthcare.uky.edu/centers/colleges/graduatebme.htm		Abhijit R. Patwardhan	257-2728
Graduate Center for Nutritional Sciences		Offers M.S. and Ph.D. programs with opportunities in agricultural, biological, behavioral, clinical, medical, social, and molecular nutritional sciences.	http://www2.mc.uky.edu/nutrisci/		Lisa A Cassis	323-4933 x81400
Graduate Center for Toxicology	GCT	Focused on giving students broad-based training which allows them to develop expertise in many areas of Toxicology. This experience is developed through independent study, course offerings and, most importantly, by conducting research under the direction of the highly-qualified scientists who comprise the Toxicology faculty.	http://www2.mc.uky.edu/toxicology/		Dr. Mary Vore	257-3760
Morris K. Udall Parkinson's Disease Research Center of Excellence		Research focuses on glial cell line-derived neurotrophic factors as a possible therapy for Parkinson's.	http://www2.mc.uky.edu/parkinsons/		Don M Gash	257-5036

Center for Applied Energy Research	CAER	Conducts research in the areas of carbon materials, clean fuels and chemicals, and environmental and coal technologies.	http://www.caer.uky.edu/		Ari Geertsema	257-0306
Center for Business and Economic Research	CBER	Conducts economic research, serves as the main storehouse of business and economic data and information on Kentucky, and provides consultation services to government agencies, businesses, media outlets, and the general public.	http://gatton.uky.edu/CBER/		John Garen	257-3581
Center for Visualization and Virtual Environments		Research and development of computer-generated immersive environments, ambient environments, dynamic scene acquisition and preservation, advanced telepresence and telecommunications, and visualization applications in areas such as education and training, medicine, manufacturing, security and daily life.	http://www.vis.uky.edu/		Dr. Bradley Carter	257-1257 Ext. 81334
Consortium for Fossil Fuel Science	CFFS	The primary goal of the CFFS research program is to develop technology to produce clean transportation fuel from resources such as coal and natural gas that are more plentiful domestically than petroleum	http://www.cffs.uky.edu/		Dr. Gerald Huffman	257-4029
Interdisciplinary Human Development Institute	IHDI	Supports research, training, advocacy, and service projects aimed at improving the lives of individuals with disabilities and their families.	http://www.ihdi.uky.edu/		Ken Warlick	257-7672 x80242
Kentucky Geological Survey	KGS	Collects data, and serves as the State's official archive for data on petroleum, coal, minerals, ground water, and topographic and geologic maps. Research investigations include the study of water resources, geologic mapping, oil and	http://www.uky.edu/KGS/		Jim Cobbs	257-5500 x144

		natural gas resources, coal and minerals, and geologic hazards.				
--	--	--	--	--	--	--