

## Computers a la carte

PCs can be less expensive, easier to upgrade if you piece them together yourself

Ever feel the need to make a sandwich while waiting for your computer to bring up a document you want? If the answer is yes, it's time for an upgrade.



**TECH Perspectives**  
**Adam Reed**

As spring cleaning nears and students dust off their computers, they will most likely discover that their machines are out of date. The rate at which technology is rendered obsolete is mind-boggling, making computers bought two years ago or two months ago out dated.

Once computer owners determine that they need to replace their aging desktop PC, they must decide where to buy it. Many large companies such as Gateway, Hewlett-Packard and Dell offer pre-built systems featuring new technology and helpful warranties to cover problems. At first glance, these may appear to be the best — and only — solutions. But that might not be the case.

To keep their computers stocked with the newest and fastest processors, hard drives and other technologies, buyers are typically forced to purchase a new computer at full price from these

companies. A more economical approach would be to replace individual components as they become outdated.

Yet replacement of these parts requires opening the computer case, which violates the warranty conditions on most pre-built computers. This does not bother some users, who wouldn't mind if they never had to do more than plug the machine in and let it run. For others — video game junkies and those who fancy themselves tech savvy — a home-built machine would be more efficient.

While building a computer might be too technical and out of reach for some, those daring enough to take on the task can follow a few simple steps and be on their way to digital freedom in no time.

The first step is to determine the individual parts that are needed. A typical PC includes a computer case with power supply, video card, sound card, motherboard, processor, memory and storage devices such as hard drives or DVD-ROM drives.

Using a cost-comparison Web site such as

Pricewatch.com to find the lowest prices available online for each component, buyers will be able to save hundreds of dollars in lieu of expensive pre-built computers. For example, a computer built to match the hardware specifications of a Dimension Desktop 8250, one of Dell's best-selling computer systems, costs almost \$400 less than Dell's base price of \$1,459 when using Pricewatch — including the cost of shipping.

The list of needed parts has recently become much shorter with the introduction of multi-featured motherboards such as NVIDIA's nForce or Intel's i845G chipset. These reasonably-priced units have onboard or integrated video, sound and networking devices, saving the buyer money and the trouble of installing the three extra components.

Step two, the building process, is reduced significantly with a feature-rich motherboard such as the nForce. The builder can effortlessly fasten the motherboard to the case with a few small screws and then snap the processor and memory into clearly-labeled slots. CD-ROM drives and other mass storage devices are then connected with IDE cables, and the computer case is put back on.

While this process may seem oversimplified, computer assembly has become less complicated during past years. As the number of amateur computer builders has continued to increase, hardware manufacturers have provided instruction manuals with detailed pictures and a straightforward language that is easy to understand, even for novice builders.

Third-party guides dealing with amateur computer work, from purchase to assembly, can be found with a simple Google search for the phrase "build your own PC." Two recommended sites from this list are AnandTech ([www.anandtech.com](http://www.anandtech.com)) and PC Mechanic ([www.pcmach.com/byoop](http://www.pcmach.com/byoop)).

Computer building is not for everyone and there is some risk involved. However, this risk is comparable to the danger of cooking dinner rather than letting a restaurant do the work. The recipe and ingredients are available to everyone; the determining factor is often whether the money saved is worth the time. With just a little work, a computer can last its owner a lifetime, without costing a life's savings.

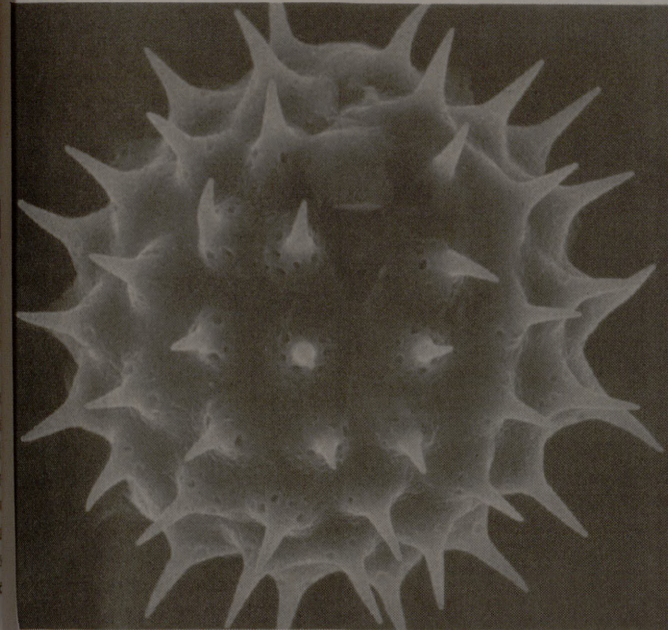


PHOTO COURTESY OF THE UNIVERSITY OF RENNES

## Forensics studies look to pollen

By Robert Stackhouse  
THE BATTALION

Forensic palynology could be used to combat terrorism and aid law enforcement agencies in criminal investigations, said Dr. Vaughn Bryant, Texas A&M professor and A&M Palynology laboratory head.

Palynology is the study of pollen grains and spores. Forensic palynology applies the science of pollen to matters of law.

The widespread nature of pollen makes it an available factor for any type of criminal investigation, Bryant said. In cases where minimal evidence is available, pollen could be a critical piece of the puzzle.

"Essentially, because pollen is so ubiquitous, pollen is going to be found at any crime scene. This is why I think what we are doing in pollen research is applicable to forensics," Bryant said.

"There is usually so much pollen in the air that the average individual inhales about 27,000

pollen grains on any given day just by walking or working outdoors. That's why this technique works so well."

Despite the ease in which a pollen sample can be located at the scene of a crime or on evidence, forensic palynology is not widely practiced. This valuable, yet untapped resource is what Bryant calls "the best kept secret in forensics."

A pollen sample taken as evidence can tell investigators the specific locale of a crime as well as the time of year it took place, and if evidence has been removed from its original location, said Dr. David Jarzen, director of global education at the Marie Selby Botanical Gardens.

"Palynology can provide you with information as to location and season (that the event took place)," Jarzen said.

Forensic palynology can also be a useful tool for law enforcement, said Dr. John Shane, director of research at the McCrone Research Institute.

"You can analyze the pollen and spore content of a piece of clothing or stored items to determine their history," Shane said. "We've looked at the pollen and spore content of counterfeit money to determine its origin."

Pollen analysis has been used to determine if honey has been illegally imported from countries outside North America through Mexico under the auspices of the NAFTA agreement, Shane said.

Pollen, in its abundance, is a cheap medium for the dispersal of biological weapons, such as viruses or bacteria, Shane said.

Palynology can also be used to fight terrorism by determining the origin of manufacture of such biological weapons, he said.

Research in forensic palynology is getting off to a slow start, however. The small number of labs performing work in forensic palynology is a result of the small number of palynologists in practice

and the even smaller fraction of those who want to be involved in forensics, Shane said.

But palynology has a high degree of reliability, thanks to the use of scanning electron microscopes, Jarzen said.

Pollen evidence is as good as any other form of evidence, but it takes carefully implemented precautionary measures to ensure this evidence remains viable in court proceedings, Bryant said. Pollen samples must be very closely monitored and safeguarded against contamination to maintain their integrity.

Because pollen techniques have not been traditionally used in proceedings, most people are unaware of how effective pollen can be, Bryant said.

"I believe...it will take a high profile case for (palynology's effectiveness) to gain national attention," he said.

# Worship Directory

### Adventist

**Seventh Day Adventist**  
1218 Ettie St., Bryan (corner of Coulter)  
775-4362  
Pastor Bill Davis  
Saturday 8:15am - Spanish Worship  
English - 11:00 am  
Sabbath School - 9:45 am

### Baptist

**Parkway Baptist Church**  
1501 Southwest Pkwy  
(979) 693-4701  
Sunday Worship 8:15 10:45 & 6PM  
Sunday School 9:30 AM  
Wednesday: Meal 5:30PM  
College Bible Study Wed. 6:30PM  
[www.pbccs.org](http://www.pbccs.org)

### Fellowship Free Will Baptist Church College & Career Class

You are invited to a Bible Study especially for students.  
Sunday mornings at 9:45  
Wednesday night supper at 5:30, followed by Bible Study at 6:30  
1228 W. Villa Maria  
779-2297  
For more information contact  
Marcus Brewer: 731-1890  
m-brewer@tamuedu  
<http://www.fellowshipfwbc.org>

### First Baptist Church UNIVERSITY MINISTRY

2300 Welsh Ave. • College Station  
**SUNDAY:**  
8:30 & 10:55-Worship Services  
9:45-Bible Study  
**WEDNESDAY:**  
7:00 p.m.-Bible Study  
Ty Cope, University Minister  
[tycope@tca.net](mailto:tycope@tca.net) • 764-1353

### Catholic

**St. Mary's Catholic Center**  
603 Church Avenue in Northgate  
(979)846-5717  
[www.aggiecatholic.org](http://www.aggiecatholic.org)  
**Pastoral Team**  
Rev. Keith Koehl, Associate Pastor  
- Campus Ministers -  
Deacon Bill Scott, Deacon David Reed, Martha Tom, Julie Mendonca  
Dawn Rouen, Roel Garza  
**Daily Masses**  
Mon.-Fri.: 5:30 p.m. in the Church  
**Holy Thursday, April 17**  
Mass of the Lord's Supper 7:00pm  
**Good Friday, April 18**  
Stations of the Cross (Spanish) 12:00 noon  
Stations of the Cross (English) 3:00 p.m.  
Passion of the Lord Service 7:00 p.m.  
**Holy Saturday, April 19**  
Easter Vigil 8:30 p.m.  
**Easter Sunday, April 20**  
9:00 a.m., 11:00 a.m., 5:30 p.m. and 7:00 p.m.

### Christian

**First Christian Church**  
900 South Ennis, Bryan  
823-5451  
**Sunday School 9:30 a.m.**  
**Morning Worship 10:45 a.m.**  
Robert D. Chandler, Minister

### Church of Christ

**A&M Church of Christ**  
1901 Harvey Mitchell Pkwy.  
(979) 693-0400  
**Sunday Assemblies:**  
8 a.m., 10:30 a.m.,  
College Bible Class 9:30 a.m.  
Sunday Night: 5:45 p.m.  
Mid-Week 7:00 p.m.

**Aggies for Christ**  
Call for on-campus pick-up info  
[www.aggiesforchrist.org](http://www.aggiesforchrist.org)

### Episcopal

**St. Thomas Episcopal**  
906 George Bush Dr. • College Station, TX  
696-1726

Services - 8:00 (Rite 1), 9:00(Family Service Rite II) & 11:15 (Rite II-for late sleeping Ages) 7:30 p.m. Evensong  
Next door to Canterbury House, The Episcopal Student Center

### Non-Denominational

**Calvary Chapel**  
AGGIELAND

A Non-denominational church that teaches God's Word verse by verse.  
Contemporary praise & worship  
Come as you are - casual atmosphere  
Currently meeting at:  
The Warehouse  
1601 Groesbeck in Bryan just off 2818 north of campus  
Currently studying the Book of Acts  
Services at 10:30 a.m. Sunday  
Pastor Jeff Hughes '95  
(979)324-3972 [www.aggieiland.cc](http://www.aggieiland.cc)

### Non-Denominational

### communityCHURCH

**SUNDAYS:**  
Prayer Service @ 10 a.m.  
Worship @ 11 a.m.

Meeting in Oakwood Intermediate School  
106 HOLIK STREET

JUST OFF GEORGE BUSH Behind the College Station Conference Center FOLLOW THE SIGNS!

Small Groups Meet Weekly

[www.comchurch.com](http://www.comchurch.com)  
260-1163

### Pentecostal

**Cornerstone Church**  
• Mid Week Small Group Meetings  
• Sunday Service at 3:00pm on George Bush, just across from campus at the College Station Conference Center.  
485-8744

### Pentecostal

**Victory United Pentecostal Church**  
Sunday 2:00 p.m. Wednesday 7:00 p.m.  
1808 - H Brothers (behind the C.S. Wal-Mart)  
764-4180

### Presbyterian

**Covenant Presbyterian Church**  
220 Rock Prairie Road

**WELCOME STUDENTS**  
Palm Sunday, April 13 "Come to the Table" Choir and Bells Cantata  
Sunday Service: 8:30 & 11 a.m. Sunday School: 9:45 a.m.

**April 14-18 Holy Week Services**  
12:00 Noon Worship and Lunch Mon., Tues., & Wed.

**Maudy Thursday**  
Supper 6:00 p.m. Worship 7:00 p.m.

**Good Friday**  
Worship and Lunch 12:00 Noon

**Easter Egg Hunt for Children**  
Saturday, April 19 10:00 a.m.  
Rev. Sam W. Steele, Minister  
694-7700  
[www.covenantpresbyterian.org](http://www.covenantpresbyterian.org)

### FIRST PRESBYTERIAN CHURCH

Helping Aggies grow in faith  
New Fall Hours:  
Worship 8:30, 11:00 a.m.  
Church School 9:30  
Fellowship on the Patio 10:30  
1100 Carter Creek Parkway  
[www.fpcbryan.org](http://www.fpcbryan.org)

### United Methodist

**A&M United Methodist**  
417 University Dr. (in Northgate) • 846-8731  
Sunday Worship: 8:30, 9:45, 10:50  
College Sunday School: 9:30, 10:45  
Sr. Pastor Dr. Jerry Neff  
[www.am-umc.org](http://www.am-umc.org)

"I need it real. I need it relevant. I need it within community."

### CELEBRATION WORSHIP

at  
**First United Methodist Church**  
• Powerful Praise  
• Solid Scripture  
• and Real Families  
Come see what's worth celebrating  
11:00 a.m.  
in the Christian Life Center  
On 27<sup>th</sup> Street, 2 blocks east of Texas Avenue in Bryan  
779-1324