sign up to be CRC CO-CHAIR! outside sac 33 you have until January 22nd at 10pm

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VOTE for your favorite ASCIT President and VP/BoC Chair candidates Monday in the student houses see our ASCIT extravaganza pgs. 2-5

The California Tech

VOLUME CII, NUMBER 13

PASADENA, CALIFORNIA

JANUARY 19, 2001

BY JONATHAN FOSTER

Have you ever wondered why all snowflakes have six sides (they don't), or why no two snowflakes look alike (in fact many do)? These were just some of the questions answered at Ken Libbrecht's Watson Lecture on January 17, at Beckman Auditorium.

Libbrecht, who was an undergraduate at Caltech, is one of the founders of the science of helioseismology, a member of the LIGO team, and perhaps the world's foremost expert on snow. It is probably a rare Caltech undergraduate who has not been forced to suffer through a "why water is so unique" lecture at sometime in their scientific past, but snowflakes are really an incredible off-shoot of water's many weird properties. "You wouldn't know it from living around here," remarked Libbrecht on the amazing snowflake, "but this stuff falls right from the sky."

The history of snowflakeology goes all the way back to Kepler, but it wasn't until 1954 that Ukichiro Nakaya performed the first systematic examination of snow. Some of what he found has yet to be explained, but a lot of the answers are being uncovered by Libbrecht in a simple artificial snowflake-generator in his lab. There, great strides have been made in understanding the odd dependence on temperature and supersaturation which results in either complex or simple snowflakes. They have also studied the quasi-liquid layer on the surfaces of melting solids (leading to many affects in atmospheric chemistry) and the excitation of crystal growth due to electrical voltage. The six-sided nature of the snowflake is a simple property of the structure of ice crystals, which tend to fit a nice six-sided pattern and grow more easily along the jagged sides than the other ones. Thus, the six-fold symmetry is preserved through preferential growth. Libbrecht also showed a slide of genuine Wisconsin snowflakes, showing at least one twelve sided-snowflake (really more like two snowflakes which grew together) and another slide of snowflakes from Antarctica

NO TWO ALIKE? Students want the C back in CS

Results of CS1 survey released, following discontent over department's choice of DrScheme

BY EMMA KANG

Conflicts between students and the CS department arose last term over the new CS1 curriculum, which incorporated a controversial language known as DrScheme.

In past years, the curriculum has focused on such languages as C and Java, which are commercially more popular languages and which students desire to learn.

While the CS department argued that DrScheme helps one better learn the core of programming, many students felt that the CS Department overlooked the practical aspect of programming. These students felt that CS1 has been geared towards training the prospective CS majors with an emphasis on theory, instead of introducing the basics of programming to students with no programming experience who may not intend to become CS majors.

In order to survey the students'

opinions better, ASCIT and the ARC conducted a web-survey, the highlights of which are as follows:

Out of the 310 students who took the survey, 62% of the students said that they were not CS majors. Considering that many of the students who take CS1 are



non-CS majors, such as E&AS majors, their opinions should be well evaluated and well reflected. Nearly 10% of these non-CS majors said that they were planning to get a programming job.

Sixty six percent of all the survey-takers either have completed the class or were enrolled in it at the time of the survey. A high percentage, 72.7%, of those indicated that the reason for taking or having taken CS 1 is for future jobs and majors. Certainly many students bear in mind that they will need some programming experience for their future career.

Contrary to the general belief that CS majors usually skip CS1,

> nearly 70% of those who expressed their option as CS or "maybe CS" either have taken the class or are taking it now. The CS1 cur-

riculum --- Introduction to programming — may well be as important to CS majors as it is to non-CS majors who want practical programming experience.

Of the CS majors, 67.5% wanted to bring C back into the CS1 curriculum, only 7.9% wanted to keep DrScheme, 11.4% wanted a combination of both, and 7.0% wanted to try

some other language in the curriculum.

In addition, 24.6% of the CS majors indicated that they prefer CS1 taught with a more practical emphasis, while only 9.6% said that they liked it with a theoretical emphasis. Fifty-six percent wanted to see both practical and theoretical aspects of programming in CS1.

As a solution for this controversy, some students suggested the idea of creating a CS menu course to provide an opportunity for non-CS majors to learn C at the same time giving freshmen another choice in menu courses. Others suggested splitting the CS curriculum into an analytical track and a practical one.

The questions can be viewed at http://www.its.caltech.edu/ ~arcomm/survey/ cs_survey.html. The statistics on the results and all the comments received are now on the web at http://www.its.caltech.edu/ ~arcomm/survey/ comments.html.

Caltech teams compete in Quiz Bowl tournament

by Dana Sadava

Last Saturday, Techers were still hard at work as Caltech Quiz Bowl demonstrated its breadth of trivia knowledge in Baxter Hall.

Ten teams competed in this intramural tournament, two of which were from the club's varsity teams. Placing first was a team composed of graduate students Micol Christopher, Matt Hunt, Jon Sievers and Mike Santos: "The Ketchup-Filled Pundits." Caltech Quiz Bowl competes in several intercollegiate tournaments a year with an "A" team, sophomore team and freshman team, all directed by Richard Mason.

Their record so far is impressive. "Last year, our grad school team finished 6th nationally and the sophomores placed 9th in their division ... Caltech A has only been beaten in tournaments by Berkeley A," said Jordan Boyd-Graber, a freshman on the team. Next they will be competing in an ACF tournament at Scripps. Boyd-Graber noted that even though most of the participants in quiz bowl are science-oriented, questions on "art, history and classical music are fair game."

PLEASE SEE SNOW ON PAGE 7

A new path is being built for students en route to Avery House

Napster use raises concerns

BY TECH STAFF

on the issue?

With the Napster case still fresh in the limelight as colleges and institutions across the country prohibit the use of Napster's MP3 file sharing, the question arises: What is Caltech's policy

The policy of Information Technology Services (ITS) at Caltech is that there is no policy on Napster as of yet. Even if there was infringement of copyright or other laws, ITS does not actively search for them and merely reports any formal complaints about them to the Office of the General Counsel.

However, ITS warns that when files are shared, issues concerning the rights of intellectual property holders may arise. Students are encouraged to puruse the Honor Code (available on the ASCIT webpage), the Institute Computer Ethics Policy (available via cit.hr.caltech.edu), copyright laws and a discussion of copyright law put together by the Office of the Intellectual Property Counsel (via the ITS

PLEASE SEE NAPSTER ON PAGE 7

General information about upcoming tournaments and contacts can be found at its.caltech.edu/~quizbowl.

Inside the *Tech*

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ASCIT and Yoghurt ASCIT Office Descriptions

\boldsymbol{Y} OGHURT

By Don Giovanni and Donna Anna

Yoghurt will be running another contest this term for an as-of-yet undetermined prize, so watch this spot in the coming weeks—identify the pseudonyms each week and win something cool.

As you may or may not have noticed, we here at the column that brings you more culture than Yoghurt have had an ongoing contest. Each week, we would come up with a new set of pseudonyms that were an allusion to something in music, opera, or art. Now we will present you with the answers and winners. Thanks to all of the people who wrote in to us. It's nice to know that someone is actually reading this. However, there can be only one winner. Out of seven weeks of allusions, first place goes to Derek Jackson (aka Dana Sadava), Sophomore, Ruddock with 6 correct answers. Second place with three correct is Shelley Erwin, Associate Archivist. Derek wins two tickets to a concert mostly of our choosing. We were considering an uplifting evening of music for orchestra and armpit choir.

Now for the correct answers in no particular order:

1) Ludwig and his Immortal Beloved. Ludwig is of course Ludwig van Beethoven. After Beethoven's death a letter was found among his papers. The letter had never been sent, but was addressed to "My Immortal Beloved." Beethoven scholars have continued to speculate on who the woman could be. Maynard Solomon believes it is Antonie Brentano, born Antonie von Birkenstock (she was big into sandals, I think).

2) Clara and Robert. Clara and Robert Schumann are, quite possibly, the most romantic story in classical music. Robert Schumann was a struggling composer studying under Wieck. He fell in love with his teacher's daughter, Clara. Clara was a virtuoso pianist, who was already gaining international fame. Her father opposed the match, saying that Schumann was a drunk and a syphilitic (which he was.) Schumann eventually took the matter before the courts and received permission to marry his sweetheart.

in a circle of fire that could only be breached by a hero who knows no fear. Siegfried, being big and stupid, of course has no fear of anything and rescues our fair maiden. The two fall in love until they betray each other due to a magic potion (yada, yada). It takes two operas (or 8 CD's), but eventually Brunnhilde throws herself (and her horse amazingly enough) onto Seigfried's funeral pyre. Bummer.

4) Ansel and Georgia. Georgia O'Keffe and Ansel Adams were two highly influential artists in recent times. Adams is arguably the king of modern photography and O'Keffe's paintings are gorgeous. O'Keffe painted mostly the southwestern US and desertscapes. Adams is most known by photographers for his use in separating black and white film colors into a zone system ranging from zone 1 to 10 with 1 being white and 10 being black. He drove an old car with a license plate that said zone 5, ironically the car was white. These two were very close friends for much of their lives.

5) Candide and Cunnegonde are two of the most decadent and loved characters is literature. The work of the French philosopher Voltaire, it is through these two people that we see that perhaps not all is for the best in this best of all possible worlds. Furthermore, the world is full of "experimental physics" and monkeys.

6) Callas and Onassis. Maria Callas was a legendary soprano in the first half of this century. She fell in love with Aristotle Onassis, the shipping tycoon, on board a cruise ship. He divorced his wife Tina, and they had very serious 9-year love affair. However, Onassis dumped Maria Callas and reluctantly married Jackie Kennedy (which is his only real claim to fame.) Some biographers think that they renewed their friendship after Onassis's marriage, but others say that their relationship just collapsed. 7) J.S., J.C., C.P.E., and P.D.Q. These are all Bachs. Johann Sebastion Bach was not only famous as a composer; he also had good genes. His sons Johann Christian and Carl (Karl) Phillip Emmanuel both became composers of some renown. P.D.Q. Bach is the alter ego of Peter Schickele, musical critic and comedian. P.D.Q. Bach has

Do YOU have what it takes to be an ASCIT officer?

"The Tech Editors' main duty

is to preside over the production

of the California Tech, which

consists of ads, comics, fillers,

more fillers, even more fillers,

some more fillers, yet more fill-

ers, the last bit of fillers, the fi-

nal segment of fillers, and the

occasional news story. The Tech

Editors are responsible for set-

tling disputes between them-

"The California Tech is also

the last means of communica-

tion between the undergraduates

and the world. There are fre-

quent meetings with only the

editors concerning printer fail-

ures and wax shortage that con-

cern the editors and no one else.

Lunch at the Ath is usually paid

"The most stressful time for

the editors is every week. Every

week, they have to make up sto-

ries, and attend meeting where

no one else is present, in addi-

tion to not failing classes. Be-

cause of this, the Tech Editors

should be suckered into "volun-

teering," gullible beyond belief,

and able to survive on three min-

Jon Foster, John Oh, Dana

utes of sleep each night."

Sadava, Suckers No Longer

by Hall Daily.

selves and unwilling writers.

Tech Edítors:

HCChair:

"The IHC Chairman's main duty is to preside over meetings of the Interhouse Committee, which consists of the chairman, the IHC secretary, and the seven house presidents. The IHC is responsible for appointing students to faculty-student committees (such as UASH and admissions), settling disputes between houses, and overseeing Rotation.

"The IHC is also the primary means of communication between the undergraduates and the administration. There are frequent meeting with the Dean's Office, Student Affairs, and Residence Life concerning matters of policy or other things that affect student life. Lunch at the Ath is usually included.

"The most stressful time for the IHC Chairman is during Rotation. During that week, you have to answer questions from clueless frosh and attend nightly meetings with the house presidents, in addition to participating in your House's rotation activities and keeping up with classes. Because of this, the Chairman should be hard-working, well-organized, and able to survive on three hours of sleep each night."

Chris Elion, Current IHC Chair

Treasurer.

"The ASCIT Treasurer's most important job is to keep good financial records and to ensure the ASCIT follows the budget. Some of the typical daily work includes writing checks, opening/closing/balancing bank accounts, and keeping track of receipts. When asked, the Treasurer must also be able to get clubs their funding each term in a timely manner. He or she should also work closely with ASCIT's bookkeeper to ensure that all relevant information is available to her when filing taxes."

- Sean McHugh, Current ASCIT Treasurer

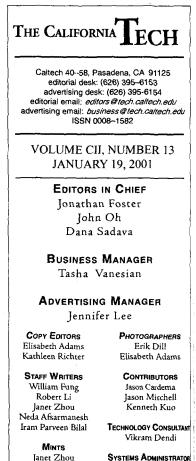
Freshman Director-at-Large:

"The Freshman Director at Large shall serve as the ASCIT Student Club Liaison and shall be responsible for maintaining communication between the Board of Directors and the officers of the various student clubs on campus. He/She shall maintain a database of clubs, officers, and e-mail contact information for use by the BoD and shall ensure that clubs follow proper procedures when requesting funds. The FDAL shall also be responsible for the publication of the Undergraduate Research Opportuni-

Secretary:

"The Secretary's most visible and most important task is to write up the ASCIT Minutes for publication in the Tech each week. The Minutes are the windows into the world of ASCIT. Besides being keeper of the ASCIT documents, other official duties include organizing elections with the Election Chair, maintaining the web page, and communicating. This position is a supportive role and the assignments change from week to week. You should be able to work well with people, be pretty well organized, and be good at taking notes. This is a very open-ended position that will become whatever you make it out to be."

Jason Cardema, Current ASCIT Secretary



Janet Zhou Neda Afsarmanesh

CIRCULATION STAFF Roger O'Brient Rick Karnesky COMICS EDITOR

Unsolicited Articles

Jason Meltzner ADVISER

6 p.m. Tuesday

noon Monday

Justin Kao

FEATURE WRITERS

Justin Ho

3) Siegfried and Brunnhilde. Two characters from Wagner's Ring Cycle, Siegfried is the son of the twins Siegmund and Sieglinde (ewww). Brunnhilde (a Valkerie) saved his mother's life and was punished by Wotan by being made to sleep

PLEASE SEE YOGHURT ON PAGE 5

ties Handbook in January.'

ASCIT Resolution XVIII (Martha-Helene Stapleton is the current Freshman Director-at-Large)

Upperclass Director-at-Large:

"The Upperclass Director at Large has three constant duties. He/she has to make sure that the copier is running smoothly and has plenty of paper, make sure all of the ASCIT publications are running smoothly and communicating any problems to the rest of the BoD, and make sure that the ASCIT van is sold. The UD@L is also a voting member of the BoD and often does other odd jobs as specified by the BoD."

Meghan Smith, Current Upperclass Director-at-Large

Director for Social Activities:

"The Director for Social Activities is the chairman of the Executive Social Committee, and is thus responsible for all ASCIT social events. These events include the ASCIT Formal, the Prefrosh weekend carnival, and various other parties. The Social Director also helps to coordinate the social events of the Houses, lending out the ASCIT lights as necessary and distributing the Multihouse and Interhouse Memorial funds."

Ted Jon, Current Director for Social Activities

PLEASE SEE ASCIT DESCRIPTIONS ON PAGE 5

Kenneth Kuo	Hall Daily
	3
Advertising:	5 p.m. Monday
Announcements (Mints):	noon Monday
Letters to the Editor:	6 p.m. Tuesday

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We live for the One. We did for the On

ASCIT in the rye



Present: BoD + Ted - Emma; Guests: Mike Schein

Written in the style of J.D. Salinger's *Catcher in the Rye*. Meeting called to order at 10:12 pm.

General Meeting

If you really want to hear about it, I guess I'll tell it to you. It's not like anything terribly exciting happens at these weekly BoD meetings. But it's been fun. I really mean that.

This is the first BoD meeting that Ted Jou's been to. He's the new Director for Social Activities, just appointed a few days ago by the ExComm. He's taking over for Melinda, who had to leave for Cambridge to study for a term. England sounds like a swell place. And that Ted seems all right. Even remembered to bring us snacks. I'm munching on some barbecueflavored chips right now. Boy, these are really good.

We start talking for like ten minutes about the Coca-Cola Ted brought in. Something about it being the "original formula"

 and what the hell the original formula was anyway. Like I
could tell. I don't even drink soda.

Eric tells Martha-Helene to get the Physics TA room cleared out of all the books and junk that's in it. Actually, it was more like an order. That girl really gets a lot of crap, being Frosh Director and all. But, hey, you've got to do what you've got to do. The funny thing is that we were the ones who moved the books there, because we needed to empty SAC 35 for the Screening Room. Since the clubs that own the books never bother picking them up, I don't know why we didn't just chuck them out in the first place. Half of them are in Chinese too. Lousy books.

So we're sitting around, shooting the breeze for a while, before Eric notices Mike waiting in the corner to talk to us about elections. Then we all get serious again. Okay, President and VP/BoC Chair signups will go down this Tuesday, January 16. The candidates will submit their personal statements for publication in the Tech this week. Next Monday, January 22 will be the election. I got it. Mike says he'll take care of putting up flyers and setting up the ballot boxes. He's a swell Election Chair, he really is.

Boy, we're really upset that Erik Dill didn't come to our meeting. He's in charge of the

Big T yearbook, but it's not done yet. He said he was going to come. Said he was going to bring a "more detailed outline of the Big T schedule" and everything. Meghan says she'll talk to him and set up another meeting time with him sometime this week.

Sean says there's nothing new on the finance side. Brief and to the point, that's the kind of guy our treasurer is. None of that phony crap.

Laura tells Sean that she needs to get reimbursed for all the dough she spent on the BoC, mostly for food.

The DVD Library is now up and running, finally. It even has a computer checkout system too. Very nice. But the thing I was worried about was how to get people to return the DVDs on time. Laura suggests sending them exponentially increasing email every day they're late. That killed me.

Eric wants to get Dance Dance Revolution for the Coffeehouse, when it comes out for Playstation 2. It makes you look like a goddamn bunny rabbit or something. I'm not kidding. It's funny as hell to watch people playing it though. Maybe they could even have DDR tournaments in the Coffeehouse. That'll really increase their business.

Eric says there are fewer and fewer people coming to Friday morning donuts, which stinks since he's got to drag himself out of bed at six in the morning to get them. Chris says there's usually a lot of lemon-filled donuts left over. I don't get that. Lemon-filled donuts are one of my favorites, much better than those crummy apple fritters that are just brown piles of apple crap.

Another thing we did last week was to audition these speakers we were thinking about getting for the Screening Room. Eric, me, and our audio consultant Hsiang Huang went to this audiophile store, GNP, to give them a once over. If there's one thing we want to get for the Screening Room, it's audiophile quality sound. They let us try out their speakers by watching DVDs for a half an hour, which was pretty nice of them. We heard explosions, rock concerts, senseless banter-the works. The speakers were great, but we didn't get them right then. You have to tell them you'll think about it. Can't seem too eager, though we probably couldn't tell the difference between the good ones and the crumby ones anyway. That's our audio consultant's job.

Eric. Sean, and I also moved a bunch of old couches to the Screening Room to use until the new ones come in. We can't open the Screening Room to the public until we get a lockable cabinet from Housing, to prevent people from taking the equipment. Not that there would be any crooks at this school, what with the Honor Code and all, but you never can tell. You know what movie we want to show for the grand opening? "Animal House," that classic college picture with the "toga, toga, toga" and frat parties and all. Eric even wants to bring extra housing sheets so people can dress up.

Then, Eric brings up his plan of getting the next ASCIT President a parking space. It's a good idea. Eric has already talked to Chris Brennen about it. The only thing is whether we should get two spaces or three, one for the VP/BoC Chair and maybe another for the IHC Chair. We talk about this for ten minutes. How could you talk about parking spaces for ten minutes? I got bored as hell.

Meghan still hasn't gotten rid of the damn ASCIT van. Every time she talks to the guy in charge of selling it, he always says he's still trying. Still trying PLEASE SEE MINUTES ON PAGE 5

thursday april 19

saturday april 21 sunday april 22

is on its way!

need more info?

questions?

weekend

friday

april 20

dina@admissions.caltech.edu

want to help?

January 19, 2001

ASCIT Election 2001

ASCIT PRESIDENT

Garrett Heffner



Pasadena, January 19 --- Playboy Magazine editor Hugh Hefner has promised to reverse the male-female ratio at Caltech. His nephew Garrett, pleasantly surprised by the news, was

quoted as saying that he would do his part to fulfill Hugh's dream by serving as ASCIT President. Voice your support for Hugh's plan and vote for the younger Heffner.



Beverly Karhson

What is Caltech but an institution for the advancement of its students? If I am elected as ASCIT president, I will be all over student representation. As I am a chronically underrepresented student here, I am well aware of the issues faced by all of you. Instead of wasting my time working for various organizations on campus, I have spent that time getting to know the student body and its needs. Many of you may be wondering what has prompted me

to run for this office. Well, I hope that with the perspective that I have gained during my time here I will be able to make my last year a memorable one for us all. I feel that the faculty here does not realize that they are playing gods to our lives and I intend to change that.

Martha-Helene Stapleton

You'd think after a year on ASCIT, that I'd want out, but even when the other BoD members would lock me out of meetings, I still came back in the name of all froshies and pre-froshies. I think I'd have a lot to contribute as ASCIT president. As a member of four houses (Fleming, Dabney, Ruddock, and Lloyd), I feel I'm representative of a lot of people and approachable. I want to improve the way ASCIT serves you, and yes, I have a car for those lovely 6:30 am Friday drives to Donut Man.



ASCIT Vice President

Oe Let's face it. The BoC isn't the most popular student converting popular student committee on campus. It meets in secret, its members are sworn not Fassler meets in secret, its members are sworn not to talk about its dealings, and from time to time, it decides with no public explanation to put students on leave from

The California Tech

Caltech. It's a black box that hands down what we expect to be justice and fairness but who can really tell? Only those people who have been a part of it really know what goes on, and that's a scary thought that puts a great deal of responsibility or BoC members.

Two years ago I was the Blacker BoC rep, and for the last year, I've been a part of the Conduct Review Committee (CRC). As a member of both groups, I gained experience in dealing with cases, and I also saw a big difference in the way the two



groups are run. Having made these observations, there are several ways that I how to improve the BoC's handling of cases. Among these are (1) taking an approach to questioning that is less formal and intimidating, (2) discouraging the occasionally club-like atmosphere among members of the Board and (3) handling cases in a timely a manner as possible. Most importantly, however, my goal is to help ensure fairness and respect to everyone, in the routing of cases to the appropriate bodie and in investigations, preliminary and full. Whether or not you like the BoC is completely up to you, but I want to make it a student body that is not feared and despised but worthy of your trust.



Jacob Zasada

The primary job of the ASCIT Vice Press dent is to uphold and maintain the Honor System among undergraduates. The exist ence of the honor code is one of the re deeming qualities of the intense, high stress academic atmosphere at Tech. In order to ensure the continuation of the honor sys tem, students must choose a BoC Chair that they think will keep the system strong for all of us.

I have the experience and dedication necessary to do the job. After serving on year as the Ricketts BoC Rep, I am, in general, satisfied with the administration of the policy. However, there is room for improvement. The honor code is an agree ment between all members of the Institute: students, staff and faculty. The home code should be applied in a manner such that no group can take unfair advantage another.

This Tuttle administration has brought a great many improvements, including the ASCIT webpage and bookmart, the DVD library and screening room, no more lame ASCIT parties (remember the pre-frosh weekend carnival... come on, who doesn't love the bouncy castle?...) Anyway, I don't want to see all that effort and enthusiasm go to waste. As FDAL, I learned what worked and what needs to be done still, and it takes a president that's enthusiastic about the job to do that. Please vote, and good luck to everyone.

Martha-Helene Stapleton

No

Vote for the one in the know, the perennial favorite, the undisputed master of apathy, and the true guiding force behind Caltech.

It's a clear choice. Yes or No? And I think we all know what the responsible choice is. So come election day, take a stand, and vote for no. Or, stay in bed and vote for me by not showing up.

One example of unilateral application of the honor code that I am opposed to the use of in-class testing by some professors on this campus. This not only portray distrust of the students by the professor but is also a violation of the honor code itself. As your BoC Chair, one of my goals will be to speak to professors and the administration to be certain that an atmosphere of trust is maintained throughout the Caltech community. Additionally, I would like to take steps to lessen the cloud of secrecy that surrounds the BoC. In particular, I would like to draft a bylaw to ensure the disclosure of the number of cases heard, as well as the number that re sulted in dismissal and conviction each term in the California Tech. In addition, believe that the attendance records for each house rep should be reported so that house members can be certain that those who were elected to represent their house and its views are present to do their jobs.

Most importantly, as your BoC Chair I will always be open to feedback from those that I serve to make sure that the honor code and the integrity of the community is upheld.

Thank you, Jacob Zasada

5 More ASCIT

MINUTE: CONTINUED FROM PAGE 3

after half a year, for Chrissake! Sell the lousy van, already! Thinking that the van will never be sold makes me really depressed.

Someone says the Jamroom is asking if they ever got their funding for the year. Sean will check his records and Martha-Helene will email the current Jamroom manager.

We digress and start talking about our Spring Break plans. We digress a lot. We really do, though the stuff we bring up can get pretty interesting. Like this time, Sean is talking about how he's going to Ireland over the break and wants to get into a good old-fashioned bar fight. That killed me. Then Eric starts talking about how it really annoys him how some people feel the need to pronounce their foreign words and phrases with the proper accent during a conversation in English. Like the word enchilada. Or guacamole. Or Puerto Vallarta. It's kind of a funny thing to get all worked up over. I think Martha-Helene was a little offended though.

Chris tells me who the people on the Renovation Committee are. It's for discussing what changes to make on the student houses, to get them up to the current standards and all. The student representatives are Chris Elion, Eric Tuttle, Martha-Helene Stapleton, Elisa Chan, and Laura Elliot. They haven't been told when the first meeting is yet.

We're going to extend the signups for CRC Chair until Monday, January 22 at 10 pm, because so far no one's bothered to sign up. I guess you can't really blame them. It is a tough job. Much harder than just writing about some lousy meeting every week. We're putting up signups for CRC student representatives, also until Monday, January 22 at 10 p.m.

In conclusion, the BoD will be happy if the President gets the parking space, ASCIT is not bankrupt, the elections go smoothly, the ASCIT lights are taken care of, the Big T comes out, the Screening Room is opened, the CLUE comes out, and the ASCIT van is sold.

That's what happened at the meeting. I guess I could tell you a little more, but I don't feel like it right now.

Meeting adjourns at 11:29 pm.

Respectfully submitted,

You C. Corden

Jason C. Cardema

ASCIT DESCRIPTIONS:

CONTINUED FROM PAGE 2

Director for Academic Affairs:

"Director of Academic Affairs chairs the Academics and Research Committee (aka ARC), whose purpose is to serve as a student advocate for issues pertaining to academics at Caltech. ARC Chair appoints the secretary of the ARC. The ARC chair, secretary, and the house reps interview and appoint three ARC reps at large at the end of the second term.

"The responsibilities of ARC include the CLUE; ARC does not directly administer the CLUE, but they are responsible for appointing and checking up on the CLUE editors. During the third term each year, ARC opens nominations for ASCIT Teaching Awards and reviews the nominations. The selected nominees are awarded at the end-of year faculty meeting. ARC last year prepared a successful luncheon prior to the award ceremony with the awardees, student nominators, and a few key school administrative figures.

"Also during the third term, the ARC interviews and appoints student members to academics related Student-Faculty Committees, which are Academic Policies and Curriculum, Educational Outreach, and Faculty Advisor Committee. Ideally, the ARC should meet frequently with the student members of these student-faculty committees and other academic committees such as the curriculum committee. ARC should be kept informed of pending policy decisions and potential problems by getting monthly reports from these committees.

"Besides these obligations, Director of Academics Affairs should set up his/her own agenda. This past year the ARC conducted a survey for the CS1 curriculum. It also made a roster of upperclassmen advisors who volunteered to help the frosh throughout their first year to select their electives and options. Right now it is seeking for a faculty member or an organization that will help the ARC achieve its continuity by guiding the new ARC to the issues that the old ARC addressed and did not finish.

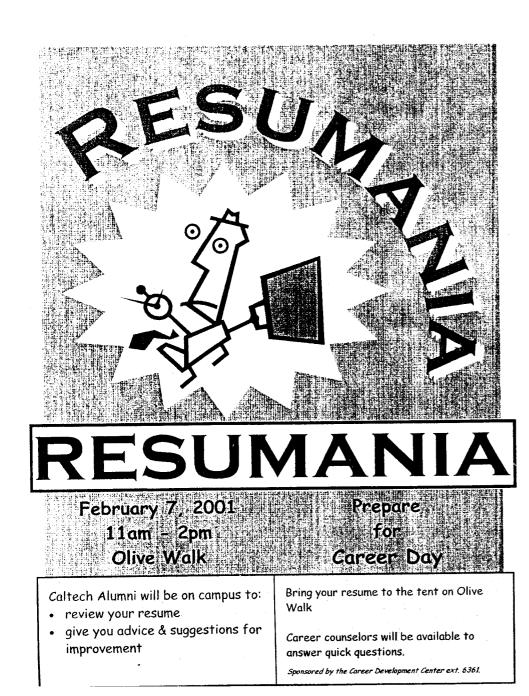
Emma Kang, Current Director for Academic Affairs

YOGHURT:

CONTINUED FROM PAGE 2

"composed" such works as "Breakfast Antiphonies," "Fanfare for the Common Cold," and the "Toot Suite."

Aside from this the LA Philharmonic is playing this weekend. And after the Saturday concert the pianist will sign copies of his all Liszt CDs. Surprisingly, the concert includes works by Liszt: Piano Concerto No. 1 and Totentanz for Piano and Orchestra. Along with Prokofiev (Symphony No. 1 ("Classical Symphony")) and Debussy (La mer) it should be a smashing good time. Unfortunately, you have to choose between the signed CD and the Pasadena Symphony which is playing Rossini's overture to his opera La Cenerentola (Cinderella), Mendelssohn's Symphony No. 3, and Prokofiev's Violin Concerto No. 2. The web site describes Jennifer Frautschi, the Prokofiev soloist, as a Pasadena native. For us her we might recognize her better as the daughter of the MOSH. Student tickets are available for both events (\$10 LA, \$6 for Pasadena I believe) and Jennifer, if you're reading this, break a leg.



Caltech Jazz Bands in concert!

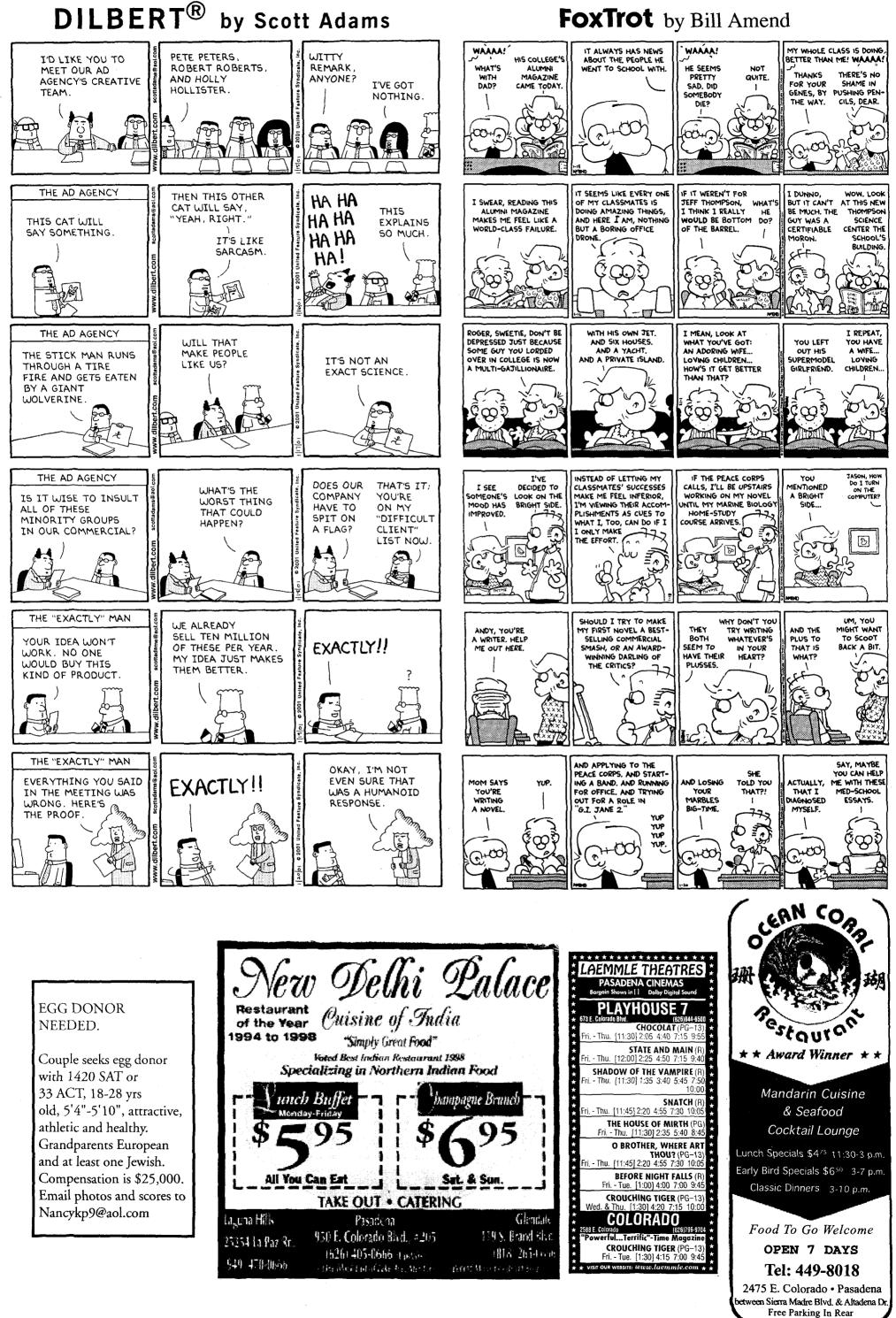
Live! Action Figures playing real jazz music!

When: who cares?

Where: Hmnnnn, good question Why: It beats studying and it is free! Who: your friends What to listen for: Miles Pavis, John Coltrane, Leslie Prayton, George Gershwin, and of course, proper intonation

> OK....here is the skinny.... Saturday--January 20, 2001 8:00 PM Beckman Auditorium Free, yeah, really......

Comics





The California Tech

How to poison someone in four easy steps



Last Monday we had an Institute holiday in honor of Martin Luther King. This was a departure from years past, when the Institute stayed open for business, choosing other ways to remember King's dedication and eventual martyrdom to the cause of racial equality. It was good indeed to have the day off, to be in step with the rest of the country. Yet I missed the campus celebrations which used to take place, the speeches of Caltech insiders and of community leaders. I missed the crowds from off Campus who came to participate. I missed the music and the feelings so deeply expressed by the assembled people. I missed the shared celebration of a dedicated life.

The extra holiday reminded me that, in preparing last week's column, I had read that Romans had religious observances 100 days out of the year. The other days were considered "vacant," i.e. ordinary, working days. The Romans obviously saw life from a point of view quite different from ours, enough to give one a major headache. Let's see what to take for it? ln 1886 it might have been acetanilide, which was replaced by the less toxic phenacetin just a year later and in

Dean's Corner

1899

by aspirin.

Of Kings

by Jean-Paul Revel

By now (starting in 1956) many of us would reach for acetaminophen, more recently for ibuprofen. I do not know what the Romans took for headaches. Perhaps they chewed on the bark of the willow (Salicaceae; Acetyl salicylate=aspirin). I doubt they lacked remedies. Long before the Romans, medicinal plants and minerals were used as remedies by the ancient Chinese, Hindus, and other civilizations. Use of remedies derived from nature continues even today, on the widely held assumption that things natural are, well, better. It is curious that in our days of carefully controlled scientific pharmacopoeia there has developed a substantial traffic in "natural" remedies believed more efficacious and less dangerous than the products of the pharmaceutical industry. Along with this is an increasing tendency for people to selfmedicate. Alcohol is only the most common natural drugs with a long history of recognized ill effects, which are often downplayed. I don't know of the threats hidden in the infusions of chamomile and other teas that my mother use to dose me with. There is increasing evidence, however, that natural remedies are not the harmless substances they are often made out to be. Yet there is very little control

over them because they are classified as food supplements rather then as drugs, essentially tying the hands of the Food and Drug Administration.

Last February the National Institutes of Health and the FDA became very concerned because of reports of interaction between concoctions of St. John's Wort, a self-administered antidepressant, and normal body chemicals or drugs prescribed by a physician. In one of many dramatic instances, the recipient of a liver transplant suddenly began showing signs of acute rejection, at a time when such a development was unexpected. The patient had been taking cyclosporine a, the drug which has made successful transplantation of organs "routine" today. It was discovered that, to counteract increasing feelings of depression, the patient had begun to dose himself with preparations of St. John's Wort. This practice coincided with a sudden drop in blood levels of cyclosporine a. Once he stopped taking the herbal, liver function rapidly returned to normal and signs of rejection disappeared. The reason, as it turns out, is that there is a receptor molecule called SXR (steroid and xenobiotic receptor) in the nuclei of human cells. This receptor binds to hypericin, the compound responsible for the wort's antidepressant ac-

tivity, leading to the activation of an enzyme (Cytochrome P450 oxidase, or more affectionately, CYP 3A) responsible for detoxification, inactivating molecules foreign to the body (xenobiotic) and some normal constituents as well. Among molecules destroyed under the influence of an activated SXR receptor are hormones, such as estrogen, testosterone and their precursors; related chemicals used in birth control pills; the anti-breast cancer agent Tamoxifen; Phenobarbital, used to inhibit seizures; retroviral drugs used in the treatment of HIV infections; and more. Enough to cause an anxiety attack!

Gretchen Vogel, in Science magazine last week, suggests that activation of SXR receptors may have been how King Mithidrates of old fortified himself against being poisoned by his enemies. His feat is described by Cambridge Don and Poet, A.E. Housman:

"They put arsenic in his meat And stared aghast to watch him eat They poured strychnine in his cup And shook to see him drink it up They shook, they stared as white's their shirt:

Them it was their poison hurt. -I tell the tale that I heard told. Mithridates, he died old."

(http://www.heartsease.org/library/modern/ housman/bio.html) You are not Mithridates so watch what you eat, drink or smoke! A bientot

Jean Paul Revel

Jean-Paul Revel

SNOW:

CONTINUED FROM PAGE 1

which showed a whole bunch of identical snowflakes. They key to the truth "no-two-alike conjecture" is that crystal growth is extremely sensitive to temperature and supersaturation. As crystals fall through the atmosphere they experience thousands of condition changes, and the chance that any two would follow exactly the same path is infinitesimal. As the South Pole however, the atmosphere is far more static-very cold and dry. There, snow crystals tend to be cylinders or planes (none of the fancy ones you see on christmas cards), and this simplicity leads to many identical snowflakes. Sorry.

The science is all very applicable to things like "self-assembly" and "carbon nano-tube arrays" but even Libbrecht admits that by now they're really just playing around. "At this point we're no longer doing science this is artistic expression." You can see their latest efforts to create "the world's best man-made snowflakes" at http:// www.its.caltech.edu/~atomic/ snowcrystals/

NAPSTER:

CONTINUED FROM PAGE 1

webpage).

ITS is also concerned about its capability to allow increasingly high network utilization.

"Access [rates] to commodity internet are usage-based." said John Dundas, Director of ITS. "If actual usage exceeds our budget allocation, we may need to limit or throttle traffic."

ITS has received formal complaints from outside organizations regarding Napster-related issues but does not forsee a need for a formal policy or statement in the near future.



ANNOUNCEMENTS

H&SS Division offers the following Selected Topic and New Course for winter term 2000.

Law 133 Business Law and Economics This course provides an introduction to modern business organizations, from both the legal and social-scientific points of view. First we will examine the basic principalagent relationship at the core of all organizations, from both a legal and economic stand point. We will then explore the governance of modern organizations, both public and closely held.

Topics covered will include corporate liability for employees' wrongdoing, managers' fiduciary duties, corporate opportunity, shareholder voting, shareholder suits, proxy contests, mergers and acquisitions, and a brief introduction to securities fraud.

The course may be taken more than once if the topics differ. Instructor: Arlen TTh 1:30-3pm BLH

SES/Pl 133 Philosophy of **Physics** In this course, we will examine conceptual issues that arise within classical (i.e. nonrelativistic) quantum mechanics. The mathematical formalism of quantum mechanics is well understood, and its predictions well-confirmed. There remains, however, the beguiling question of how the world could possibly be that way. In particular, we will examine two problems. 1) The standard formalism for quantum mechanics includes two different rules for the evolution of a physical system. One rule applies when the system is not being measured, the other when the system is being measured. This raises two fundamental questions: what is measurement, and why should a system behave differently when it is being measured? 2) In certain types of physical system, distant particles can coordinate with each other across a great distance -- so great that any signal sent from one to the other would have to travel faster than the speed of light. How is this coordination possible? A number of incautious thinkers have drawn outrageous conclusions from these features of quantum mechanics: quantum mechanics proves that we have free will, or that all things in the universe are interconnected, or that ESP is possible. We will not be discussing any of these claims explicitly, but students who take this course will acquire the resources to examine hese claims critically. Instructor: Hitchcock -W7pm 127 Bax *Copies of HSS course schedules are available in 228 Baxter. All other selected topic course descriptions are posted in Baxter.

sion Group: Looking for a safe and supportive place to discuss issue such as comingout, being out, dealing with family, coping with a homophobic culture, and being GLB at Caltech? Want somewhere just to make new friends? We invite you to the Gay/Lesbian/Bisexual Discussion Group, which meets on the first and third Tuesdays of each month from 8:15 until 10:15pm in the Health Center Lounge. This is a confidential meeting and does not imply anything about a person's sexual orientation - only that s/he is willing to be supportive in this setting. The group usually discusses a particular relevant topic and then moves on to the general discussion. Refreshments are served. If you would like more information, please call ext. 8331

Gay/Lesbian/Bisexual Discus-

Community Service Opportunities Abound! The Caltech Y offers students and staff a variety of ways to participate in community service. Opportunities include working with Habitat for Humanity, Union Station Homeless Shelter, math tutoring (on or off campus), reading tutoring, and working at local hospitals. One-time community service events are planned each term and opportunities for service on a regular basis exist. Undergraduates with federal work-study can receive \$15/hr for their community service work. To be added to the community service interest email list, or for more information about the Community Service Program, please contact Kristin Abbott at kabbott@caltech.edu or call 626/395-3180.

Paid Summer Internship in Silicon Valley Free room and board, \$1000 spending money for 8 weeks, paid for weekend trips, up to \$5000 for eight weeks of experience with a Silicon Valley startup. Check out www.uofdreams.com and if you have any other questions email *melly@its.caltech.edu*.

Events

Science, Ethics, and Public Policy LECTURE SERIES Antirelativists, 1914-1920. Thursday, February 15, 2001 4:00 p.m. Room 25 Baxter Building

Dr. John D. Norton, Professor of History and Philosophy of Science, University of Pittsburgh will discuss Einstein and the Canon of Mathematical Simplicity. Thursday, March 8, 2001 4:00 p.m. Room 25 Baxter Building

The Caltech Ballroom Dance Club presents a Professionally Taught Beginners' American Foxtrot dance class. This is a 5-week series held on the Caltech campus in Winnett Lounge from 7:30-9:30pm, with practice continuing until 9:30pm on five successive Wednesdays: Jan 17, 24, 31, Feb 7. The cost for the series is, \$30.00 for the five lessons, single lessons are \$7.00 [\$20.00 and \$5.00 respectively for undergraduates] Everyone is welcome No partner is necessary.

Caltech Quiz bowl will be holding an intermural tournament on Saturday, January 13th, open to all members of the Caltech community. Information can be found at www.its.caltech.edu/~quizbowl/ im2001.html or by contacting tournament director Jordan Boyd-Grabera by email at jbg@its.caltech.edu

SAVE THE DATE! Prefrosh Weekend is coming up! Thursday, April 19th - Sunday, April 22nd, 2001 If you have any questions, please email Dina Figueroa dina@admissions.caltech.edu

SCHOLARSHIPS

The Financial Aid Office has applications and/or information on the following as well as additional undergraduate scholarships. All qualified students are encouraged to apply. Our office is located at 355 S. Holliston, second floor

The National Academy for Nuclear Training is offering \$2,500 scholarships to eligible students majoring in nuclear engineering, power generation health physics, electrical or mechanical engineering, or chemical engineering with nuclear or power option. For further information on the National Academy Educational Assistance programs, please visit www.nei.org. Applications are available in the Financial Aid Office. Please send completed application materials to: National Academy for Nuclear Training, Scholarship Review Committee, P.O. Box 6302, Princeton, NJ 08541-6302. Entries must be submitted to the National Academy for Nuclear Training by February 1, 2001.

The American Electroplaters and Surface Finishers Society (AESF) is offering scholarships to upper class undergraduate and graduate students who are interested in careers in the surface finishing field. Applications are available in the Financial Aid Office. Please send completed application materials to: AESF Scholarship Committee, American Electroplaters and Surface Finishers Society, Central Florida Research Park, 12644 Research Parkway, Orlando FL 32826-3298. Entries must be submitted to the AESF Scholarship Committee by April 15, 2001.

The National Institutes of Health scholarship program, the Undergraduate Scholarship Program for Individuals from Disadvantaged Backgrounds (UGSP), targets students who are committed to pursuing careers in health research or basic biomedical science research. For further information and an application go to the Internet site at: http://ugsp.info.nih.gov

The American Society of Naval Engineers sponsors a scholarship program to encourage students to enter the field of naval engineering. Programs of study which apply to the diverse field of naval engineering include architecture, marine, mechanical, civil, aeronautical, electrical and electronic engineering, and the physical sciences. The deadline for receipt of scholarship applications is February 15, 2001. Call (703)836-6727 if you have any questions about this program.

The Korean American Scholarship Foundation (KASF) is accepting applications for scholarship awards ranging from \$1,000 to \$5,000. Applicants must be full-time students of Korean American heritage enrolled in at least their second year of college, graduate school or professional school in the Western Region. Applications are available upon written request by writing to Scholarship Committee, KASF Western Region, 3435 Wilshire Boulevard, Suite #2450, Los Angeles, CA 90010 or via the web at www.ksaf.org. Entries must be submitted to KASF by January 31, 2001.

The College Women's Club of Pasadena Scholarship Foundation is accepting application for scholarship and fellowship awards for the 2001-2002 academic year. Applicants must be female, U.S. Citizens, full-time undergraduate and graduate students, sophomore or above, and must have a 3.0 or higher GPA. Applications are available in the Financial Aid Office. Entries must be submitted to the Financial Aid Office by February 9, 2001.

The Coalition of Higher Edu cation Assistance Organizations (COHEAO) will award six scholarships to eligible undergraduate students for the 2001-2002 academic year. Applicants must be U.S. citizens; have a 3.75 or above GPA; enrolled at a COHEA0 member school; must be entering their sophomore, junior, or senior year at the member school; and only one scholarship per family per academic year will be awarded. Further information about the COHEAO scholarshir is only available via the web a www.coheao.com scholarframe.html. Materials must be submitted by March 1, 2001.

The Danville-Alamo Branch of the American Association of University Women (AAUW) is offering scholarship awards ranging from \$500 to \$1,000 to female college students entering their junior or senior year for the 2001-2002 academic year. For more information and application package, please send your request with a \$0.66 stamped self-addressed large envelope (9" X 12") to Linda Elsdon, 61 Milano Court, Danville, CA 94526. Entries mus be postmarked by April 2, 2001.

To submit an event for the Mints, contact mints@ugcs.caltech.edu or mai

mints@ugcs.caltech.edu or mai your announcement to Caltech 40-58 Attn: Mints. Submissions should be brief and concise Email is preferred. The editon reserve the right to edit and abridge all material. Deadline is noon Wednesday. Unless specified, all mints will run for two weeks.

Winter Quarter 2000:

The William and Myrtle Harris Distinguished Lectureship in Science and Civilization presents the following lectures:

Dr. Ute Deichmann, Genetics Institute, University of Cologne will discuss The Slow Start of Molecular Biology in Post World War II Germany: The Impact of the National Socialist Science Policy. Thursday, February 1, 2001 4:00 p.m. Room 25 Baxter Building

Dr. David Rowe, Professor of History of Science and Mathematics, Mainz University, Senior Fellow, Dibner Institute will discuss Einstein's Enemies: German THE CALIFORNIA TECH Caltech 40-58 Pasadena, CA 91126