Michael M. Watkins named next JPL director

This article was originally published online at caltech.edu.

Michael M. Watkins, the Clare Cockrell Williams Centennial Chair in Aerospace Engineering and director of the Center for Space Research at The University of Texas at Austin, has been appointed director of the Jet Propulsion Laboratory and vice president at Caltech, the Institute announced May 9.

Watkins will formally assume his position on July 1. He succeeds Charles Elachi, who will retire as of June 30 and move to the Caltech faculty.

Watkins is an internationally recognized scientist and engineer. Prior to assuming his current position at The University of Texas in 2015, he worked at JPL for 22 years, where he held leadership roles on some of NASA's highest-profile missions. Watkins served as mission manager and mission system manager for the Mars Science Laboratory Curiosity Rover; led review or development teams for several missions including the Cassini, Mars Odyssey and Deep Impact probes; and was the project scientist leading science development for the GRAIL moon-mapping satellites, the GRACE Earth science mission, and the GRACE Follow-On mission, scheduled for launch in 2017.

He last served at JPL as manager of the Science Division and chief scientist for the Engineering and Science Directorate.

"Michael's record of successful mission leadership and impressive management skills quickly distinguished him as a leading candidate for this position," said Caltech president Thomas F. Rosenbaum, the Sonja and William Davidson Presidential Chair and professor of physics. "As JPL director, Michael will build upon the laboratory's outstanding achievements in planetary exploration and earth science, strengthening the connections between Caltech's campuses and partnering with NASA to deliver highly complex and nuanced missions."

"I've known Mike Watkins for more than 20 years now," Elachi said. "Mike has played important and varying roles in a number of important JPL areas. His intimate knowledge of the lab and staff, combined with his highly diversified set of skills and knowledge base in science and engineering, will serve JPL very well in the years to come."

A committee composed of Caltech trustees, faculty, senior administrative leaders and a member of the JPL executive council conducted an extensive search and recommended Watkins to Caltech's president.

Watkins holds a bachelor's degree, master's degree, and Ph.D. in aerospace engineering from The University of Texas at Austin. He has published broadly in both engineering and science, contributed more than 100 conference presentations and served on the boards of numerous international scientific and engineering societies.

"JPL has such a talented and deeply committed staff," said Watkins. "It is a privilege to have this opportunity to lead the laboratory to even greater discoveries. I look forward to working with my colleagues on campus and across NASA to forge new directions in space exploration and earth science."

News briefs from around the globe

A brief list of events from the past week, compiled by the editors

Captain America: Civil War has fifth largest opening weekend ever

$181.1 million earned in North America is among most ever in one weekend, but is still less than the $200 million estimate from critics [TIME]

London elects first Muslim mayor

57 percent of vote goes to Sadiq Khan of the Labour Party, who beat Zac Goldsmith of the Republican Party [TIME]

Week-long fire in Canada still burning, thousands evacuated

20 percent of homes in Fort McMurray have been destroyed [BBC]

Norovirus hits British cruise ship

200 reported ill after ship docked in Portland, Maine, last month [CNN]

Kenyan government to close all refugee camps, displacing many

600,000 people currently living in camps will be displaced; most have nowhere to go [CNN]

World Fest: Mellon Mays Fellow Halston Lim shares powerful experience in learning about social inequality in South Africa

NEERA SHAH
Page Editor

As part of last week’s World Fest, held by the International Offices and the Caltech Y, junior physics major Halston Lim gave a talk on his trip to Cape Town, South Africa. Lim traveled there for a conference for Mellon Mays Undergraduate Fellows around the world. He is one of 11 fellows at Caltech and was the only one to travel to the conference, where he met with 46 other fellows. During his presentation, Lim shared not only what he learned about early modern South African history but also a personal account of his trip.

Under Apartheid, the government labeled people as black, colored/mixed, or white as a way to assign political rights to people. Tribal people were categorized as black and had the lowest priority, while those who had some white ancestry were classified as colored/mixed and had more rights than blacks but fewer than whites. This classification system is present today.

At the conference, Lim heard talks from professors and researchers who are studying social inequality in South Africa. Apartheid rule ended in South Africa more than 20 years ago, but many of the inequalities still persist today. Lim also traveled with the fellows through Cape Town and surrounding areas in order to understand how inequality is still manifest in daily life across South Africa.

One of the most prominent geographic features in the area is Table Mountain, which also holds historic importance for the native Khoisan tribes. When the Dutch first arrived in Cape Town, they
The Caltech Y Column serves to inform students of upcoming events and volunteer opportunities. The list is compiled by Neera Shah from information given by the Caltech Y and its student leaders.

1. Caltech Y Photo Contest

Deadline to Submit Photos: Wednesday, May 11th

Want to win $100? Enter the Caltech Y Photo Contest!

For our centennial year, the Caltech Y will be holding our first ever Photo Contest. If you have participated in a Caltech Y program and are a current student, submit your photos for a chance to win. We’re giving a $100 prize to the winners in each of the five photo contest categories.

The 5 categories come from the Caltech Y pillars: Perspective, Adventure, Service, Civic Engagement, and Leadership.

Photos should demonstrate the pillar in action. Photos of people are preferred, but exceptional scenic pictures will also be accepted. The deadline to submit photos is Wednesday, May 11th.

After the deadline, we will select the finalists, upload them to our Facebook page, and our fans vote for their favorites to determine the winners. Winners will be announced on June 1st.

For more info on how to enter visit: http://caltechy.org/photo_contest/

2. Caltech Y India Cultural Trip

Applications Available Now

December 10 - 20, 2016 | Cost: $950 | Applications Due Thursday, May 12th

The Caltech Y, in partnership with the SURF Program and IIT Gandhinagar (IITGN) in India, is coordinating a trip to Ahmedabad, India. Join us for an exciting trip to explore India as an emerging nation and its potential role as a global leader in the context of its history and culture.

The Caltech Y group will be hosted by IITGN and discussions and trips will be led by IITGN faculty.

The trip is open to undergraduate students only. Applications can be found at http://caltechy.org/programs_services/areas/

Dishes from around the world shared at International Food Fair

Students bring French and Indian dishes to the International Food Fair.

Photos Courtesy of Gloria Ha

**Caltechlive!**

**WEDNESDAY, MAY 11, 2016 • 8 p.m.**

**EARNEST C. WATSON LECTURE SERIES**

**SIGNED, SEALED, DELIVERED: HOW PROTEINS GET WHERE THEY’RE SUPPOSED TO GO IN CELLS**

Miller’s presentation will focus on his lab’s efforts to computationally simulate the protein translocation process and to predict ways of controlling the targeting and delivery of proteins for therapeutic or biotechnological applications.

**Free Admission**

Caltech’s Beckman Auditorium

www.events.caltech.edu

**Call campus x 4652 for information**

**News**

**THE CALIFORNIA TECH**
KATHERINE GUO  
Editor-in-Chief

While frittering my life away looking up ideas on the internet, I saw a recipe titled "Magic Cake." I immediately dismissed it as an exaggeration, but later, I thought about the question of how it was magic nagged at me until I searched it up again. The pictures were deceiving—the custard, on the bottom, had already set by the time I got my as I forgot about adding the milk until I finished mixing the egg white liquid. I also completely forgot about putting it in the oven, knowing that I wouldn't have enough heat to do this, it feels trivial since I wasn't a kid anymore. I guarantee you that email me your recipe and photo proof, or you personally come to my house and make it in front of me. Anyway, here I am, I years later, hoping again that a recipe would work despite my complete lack of understanding how the ingredients would mix together and bake into a two-layered cake. I used a recipe for a chocolate variation of magic cake here: http://whiteonricecouple.com/recipes/chocolate-magic-custard-cake/. Reading about how silly the custard would be and how it was to make, I felt relatively optimistic about the endeavor. However, I knew that I had no access to a stand mixer, but I also ridiculously believed in my ability to whip cream from egg whites by hand. As I proceeded with the instructions, I began to dread the task of whipping the egg whites. If you have ever used a stand mixer to do this, it feels trivial since you’re setting back and letting the machine beat the egg whites into fluffy submission for a few minutes. However, you can’t really appreciate how much better off that is until you stand for almost an hour wildly shaking around a fork in foamy egg whites like it owns you money. It was a great workout, but ultimately I settled for bubbly egg white liquid. I also completely forget about adding the milk until the end. I assumed that would be fine, but my baking friends tell me that the order of adding ingredients does indeed matter. In short, boba is like pizza. It’s easy to make, you don’t need a lot of tools, and if you’ve had enough or I just don’t have a solid opinion, I didn’t mention some local places. Here are some that I like even more: Cafe 86 (Old Pas), Bird Pick Tea & Herb (great, but better for non-boba brewed tea), Utsu Cafe (and for the most obsessed tea junkie), Jin Tea Shop (tried it once, a bit expensive) and it’s Boba Time (amazing name). Here we are! At the end of the day, just remember that you can’t go wrong with boba—even if it’s an exaggeration. Whether you’re using bubble tea to ingest a healthy dose of recycled teflon (eeek!). Oh, and by the way, feel free to reach out if you have a car and are thinking of making a trip.
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Now choose one of the most trusted institutions in FINANCE.

When you want unsurpassed stability, integrity and value for your money, Caltech Employees Federal Credit Union offers an honest alternative. There are no gimmicks. No annual fees. No harsh penalties.

Just some of the lowest lending rates and highest savings rates in the nation…and a state-of-the-art eBranch for easy, convenient online and/or mobile access to your account. We’re the overwhelming choice for financial services among the entire Caltech family. If you haven’t yet joined, call or visit us online or in person today. You belong here.
Hill places third, earns All-SCIAC honors at Championships

GOCALTECH.COM
Actual Sports Content Editor

LOS ANGELES (Apr. 30, 2016) – Senior Morgan Hill outsprinted a truly amazing senior year as he earned All-SCIAC honors with a third-place finish in the hammer throw to kick off a successful SCIAC Championships for Caltech track & field on Friday and Saturday.

Having broken an 81-year-old program record at his last meet just two weeks prior, Hill further solidified his status with an all-time classic in SCIAC track & field this year.

“My improvements have been impressive, but his accomplishments are an extension of his hard work and effort this year,” Head Coach Ben Rapheelson said. “He has taken a positive, resilient approach to every practice and competition this year. His work ethic is unparalleled, and he is a true asset to our track team.”

Hill had a great day on Friday, finishing in the top three in the hammer throw with a personal-best performance of 34’2.25” and personal best in the shot put with an effort of 17’10”.

The distance core of sophomore Michael Hashe and freshmen Rohan Choudhury and Joey Hong all performed in a chaotic 59-yard race, with Choudhury placing higher than his seed with a slight time drop while Hashe dropped off more than four seconds (17:53.79) and Hong trimmed almost five (16:52.54).

In the 1500m, junior Lilly Liou cut off 14 seconds to clock a 5:35.37 while freshman Rohan Doshi came within 10 seconds of qualifying for finals (4:58.46) and sophomores Genes Vaughan and Chris Haack shaved four seconds (4:40.82) and four seconds (4:41.51), respectively.

All three 400m runners trimmed significant time as well, with Bouraustich also bettering his career-best time as a rookie with a 53.71. Yeis crossed in 56.79 and junior Teddy Hu ran a career-best 62.23.

Other highlights included senior Anup Kishore competing in the pole vault, triple jump and javelin in his final SCIAC Championships, as well as freshmen Michelle Maraisan getting return to action with a competitive effort as she continues to recover from injury and freshman Muskan Goyal recording her second-best discuss throw of her rookie season on the big stage.

“SPIRIT THE SCIAC is a competitive, deep conference,” Rapheelson said. “It pushes our scholar-athletes to strive for more and to be at their absolute best when it matters most. I feel our team fed off that and really thrived this past weekend. It was a positive group that was very focused on delivering their best efforts and supporting their teammates to do the same.”

CLAREMONT, Calif. (Apr. 30, 2016) – A spirited rally in singles fell just short for Caltech women’s tennis against University of La Verne on Saturday, as another pairing suffered a setback in the match.

Spirited rally falls just short for women’s tennis

GOCALTECH.COM
Actual Sports Content Editor

Last Saturday afternoon, the Beavers went toe-to-toe with the higher-ranked Leopards from the outset, splitting the first doubles matches before narrowly dropping the third. The foes split courts #1 and #3 by identical 8-6 scores, with La Verne narrowly pulling out #2 doubles, 8-6.

La Verne soon stretched the match lead to two at 9-1 with a victory at #1 and pulled away further with a 10-2 victory at #2 after sealing a 6-4 victory at #1 and #3 doubles, 8-6.

Senior Edward Garza recorded a personal best in the shot put with an effort of 34’2.25” and personal best in the hammer throw to kick off a successful SCIAC Championships, as well as freshman Michelle Maraisan getting return to action with a competitive effort as she continues to recover from injury and freshman Muskan Goyal recording her second-best discuss throw of her rookie season.

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FINISHES IN SECOND PLACE AT 79- overall and in sixth place at 2-5 in the SCIAC, earning the Beavers a #7 seed in this weekend’s #8 CIAA Championships.

Caltech 4, Pomona-Pitzer 9

Pomona-Pitzer did not drop a set against Caltech, leading 4-0 after the doubles matches. Sophomore Vinici Chen managed to take two games against the Sagehens’ West No. 1 doubles team.

The match was decided by Malini Southern at #2, who dropped an 8-4 decision, and the #3 and #4 singles matches.

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ASCIT Minutes

Meetings are every week in SAC 13

ASCIT Board of Directors Meeting
Minutes for 5 May 2016. Taken by Phillip An.

Officers Present: Nima, Bobby Sanchez, Jay Palekar, Kalyn Chang, Phillip An, Robin Brown, Annie Chen

Call to Order: 12:06
Anjali (A capella) – Love sucks a capella concert was held last term in Dabney Hall
- 200 people showed up to concert
- Request money for sound system ($85), instead of getting members to pay

Oasis – request funding for annual show ($1000)
- Show will occur on 5/15 at Ramo Auditorium
- Money is for rental of auditorium, food, and water/utensils

President’s Report (Nima):
- New BOD, once instated, will appoint a new secretary
- Midnight Donuts will be on May 18th
- Official turnover is Monday the 9th

Incoming Presidents Report (Serena):
- Transition dinner
- Fire and Ice event on olive walk with food to motivate students to come out from fire drill
- The Bings are retiring, May 21st concert to commemorate retirement

Officer’s Reports:
- V.P. of Academic Affairs (ARC Chair: Jay):
  - Various faculty meetings regarding course enrollment and policies
  - Faculty board meeting on Monday regarding 12-term tuition policy results
  - Curriculum committee dealing with course registration and curriculum changes
  - ARC elected new reps and secretary
  - ASCIT teaching award form is out – can nominate Professor, graduate, and undergraduate TAs
  - Committee appointment will be next week

- V.P. of Non-Academic Affairs (IHC Chair: Bobby):
  - Committee appointments were this past weekend
  - Transition retreat will be next weekend
  - In the process of picking rotation planners

- Director of Operations (Sean):
  - Absent

- Treasurer (Kalyn):
  - Getting a new projector for the screening room

- Social Director (Robin):
  - Movie is tomorrow at Edwards Alhambra at 9:30 pm
  - Trivia night is tonight at Chouse
  - Movie is tonight at Chouse

- Secretary (Phillip):
  - Will discuss transition lunch with Tom
  - Transition retreat will be next year

If anyone has any questions or concerns about a section of the minutes please email the appropriate officer. We are happy to answer any questions. The next meeting will take place on May 12th at 12pm in Winnett Lounge.

Meeting Adjourned: 12:27 pm

REMINDER FROM COUNSELING CENTER:

A drop-in mindfulness meditation group
- Meets every Tuesday, 12:00-12:50 p.m.
- Bings: 1st floor of Winnett Lounge

Spring Term Office Hours
12 p.m. - 1 p.m.
Thursday, May 12
Wednesday, May 18
Tuesday, May 24
Friday, June 3

Contact: Adam Jacobo
626.395.5907
ajacobo@caltech.edu
Features of the city visible from this elevation, such as the Dutch water reservoir and direction of streets, show how European colonialism has shaped Cape Town.

Lim discusses perspective, social inequality in South Africa

One of the most well-known plantations from the colonial era is Groot Constantia, which employed up to 30 slaves at a time. There is now a museum on the plantation, owned and operated by the South African government, that focuses on the life of these slaves during the early modern period. The museum is home to artifacts such as a slave’s toothbrush, slaves’ personal belongings and documents showing ownership of slaves as property.

Yet another manifestation of social inequality was in the creation of townships. Europeans in the colonial cities needed labor during the gold rush but would not allow workers to live in the cities. Rather, the South African laboratories were forced to live in “townships” and walk miles to and from the cities for work. They also had to carry “dumb passes” that had to be stamped by the Europeans to allow them to even be able to travel between townships and cities.

There were some areas that were fully integrated though, such as the District Six neighborhood in Cape Town. But under Apartheid, this was considered to be unacceptable. Town. But under Apartheid, this was.

One of the largest concerns Lim has is another example of how there are things in the architecture that speak loudly to what happened.”

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Monday Punday

This picture represents a common phrase, title, or person.
Think you know the answer? Take a guess at mondaypunday.com/48

Guess the science terms in band/rapper names!  

C. Bhad