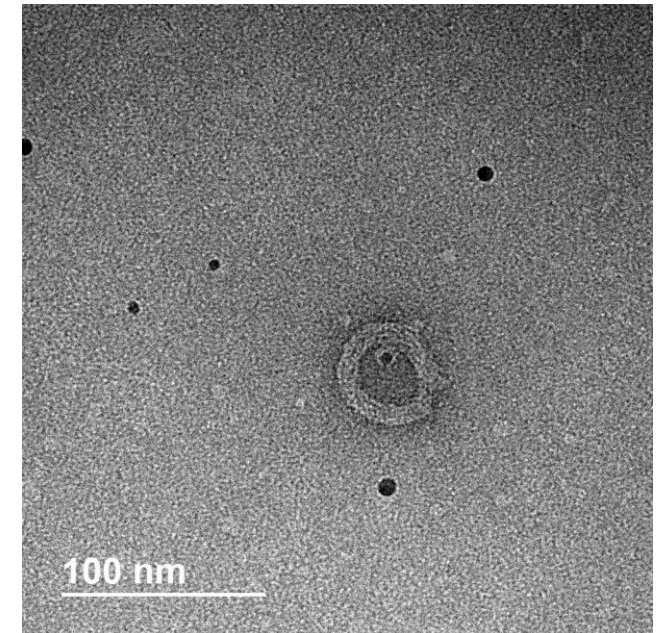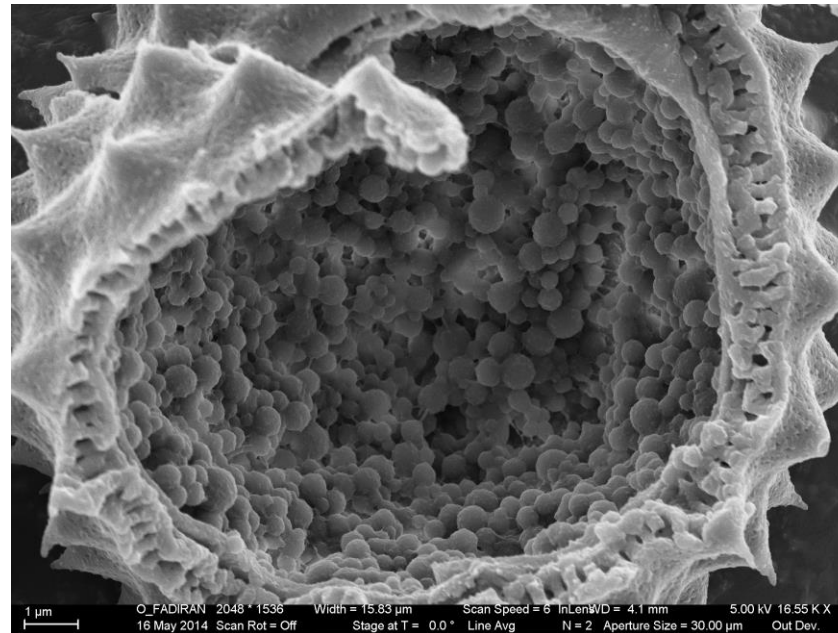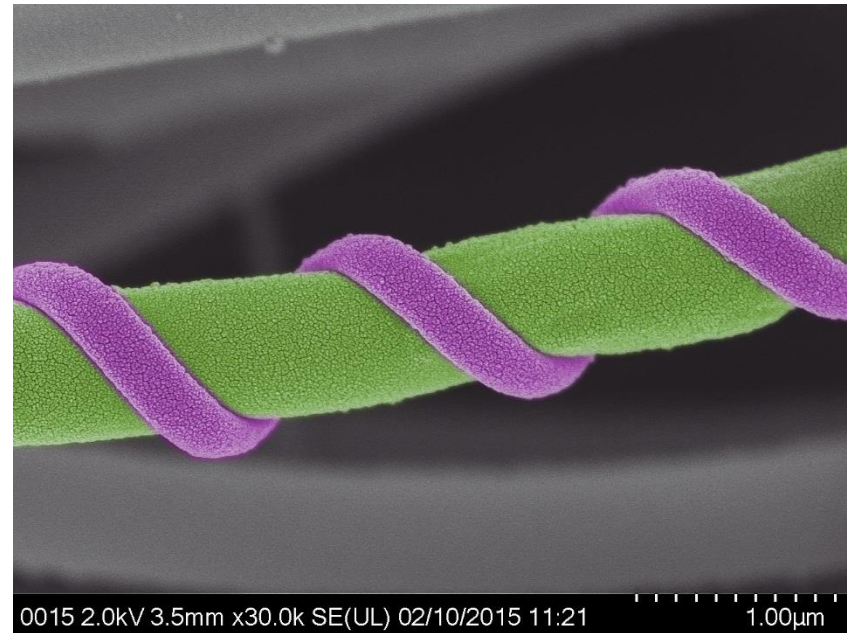# IEN Image Contest Award winners for the 1st half of 2015

## 1st Place – Li Xiyu

## Co-2nd Place – Timi Fadiran and Travis Meyer



Researcher: Li Xiyu (BME)
PI: Younan Xia (GT-BME)
Tool: Hitachi SU8230 SEM
Magnification:  30,000X
Sample: $SiO_2$-coated Electrospun fibers
Info:  These electrospun poly-lactic acid (PLA) fibers are being studied for use as replacement tendons in the body. When ruptured, tendons do not regenerate.  The challenge is to create a man-made material that is bio-compatible and has similar elasticity and strength as natural collagen-based tendons..

Artist:  Timi Fadiran
PI:  Carson Meredith (ChBE)
Tool:  Zeiss Ultra 60 SEM
Magnification: ~16,500 X
Sample:  Epoxy-coated pollen grain
Info:  Fracture surface of pollen-epoxy composite with treated pollen. Treated pollen is able enhance the mechanical properties of an epoxy matrix  due to the good adherence of the epoxy matrix to the treated pollen and the high strength of the pollen grains.

Artist:  Travis Meyer
PI:  Gang Bao (GT-BME) / Younggang Ke (Emory)
Tool:  Hitachi HT770 TEM
Magnification: ~500,000 X
Sample:  ~8nm iron oxide "basketball" traveling through a DNA "Basketball Hoop" – DNA Stained with Uranyl Formate for contrast.
Info:  We are trying to, eventually, pattern magnetic iron oxide nanoparticles into pre-arranged patterns using rationally designed DNA origami platforms to improve their uses for MRI contrast, magnetically-guided drug delivery etc..

# Image Contest

Dear IEN colleagues:

Have you ever captured an image so fascinating you felt it deserved an award? Well, Here's your chance!
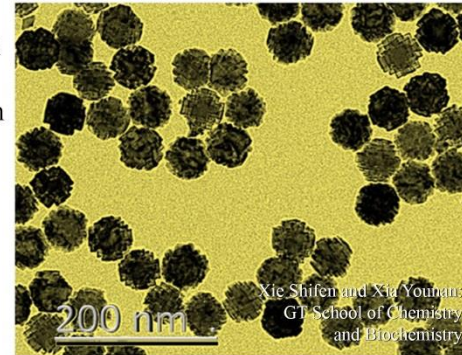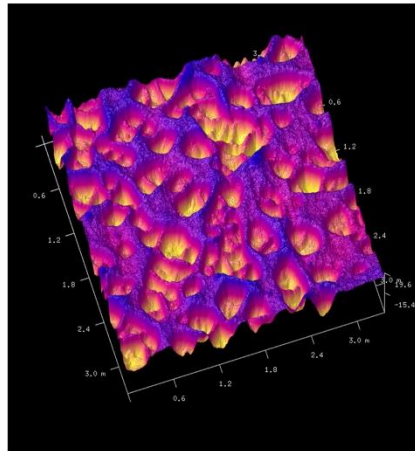
Starting this Monday, April 28th, the IEN Characterization group will be hosting a monthly image contest open to all IEN non-staff users. Three monthly winners will each receive 5 free hours on the characterization tool of their choice and advance scheduling privileges as well as public recognition for their work.

-Submissions open April 28th. Monthly submission window is the 1st of the month through the 27th.

-**Grand Prize** winners will be chosen from the monthly winners twice each year with the first prizes handed out at our IEN USER meeting on June 26th.:

-1st prize (1 winner) - $60

-2nd prize (2 winners) - $30

Xie Shifen and Xia Younan:
GT School of Chemistry and Biochemistry

200 nm

Up to 4 entries per person -
Photoenhancement is allowed -
Images must be taken on an IEN tool -
Images should not be previously published -
Must provide details of image -
(tool, sample, PI, etc.)

Send images as .bmp to walter.henderson@ien.gatech.edu

IMAGE CONTEST TEXT ANNOUCEMENT

In order to showcase and celebrate the beautiful, strange and incredibly small work occurring in the IEN cleanrooms and labs, the IEN Characterization Group is holding a monthly image contest open to all IEN facility users. The submitted work will be used to promote IEN users' research and IEN capabilities to potential users, on campus and beyond. Three monthly winners of the contest will each receive 5 free hours on the characterization tool of their choosing, and the monthly winners will be entered into a semi-annual Grand Prize selection for cash prizes of $60 for First Prize and $30 for each of the 2 Second Prize winners.

If you would like a chance to see you small image get big representation, check out the full contest details below or, for further questions contact Walter Henderson at [walter.henderson@ien.gatech.edu](mailto:walter.henderson@ien.gatech.edu).

**Image Contest Submission Dates**
Images are accepted the $1^{st}$ – the $27^{th}$ of each month. Monthly winners will be notified by email.  Grand prize winners will be twice a year, typically near the end of the school year in May and near the end of the calendar year in December.

**Contest Rules**

- Images must be taken on an IEN tool
- Images should not be previously published
- Photographer must provide details with image such as the tool, sample type, PI etc.
- Photo-enhancement *is* allowed, (e.g., coloration, added artistic touches, etc.) but the original image details should not be altered.
- Up to 4 entries per user per month
- Submit images as a .bmp file to walter.henderson@ien.gatech.edu