



University of Iowa Health Care

Presentation to

The Board of Regents, State of Iowa

September 12-13, 2018

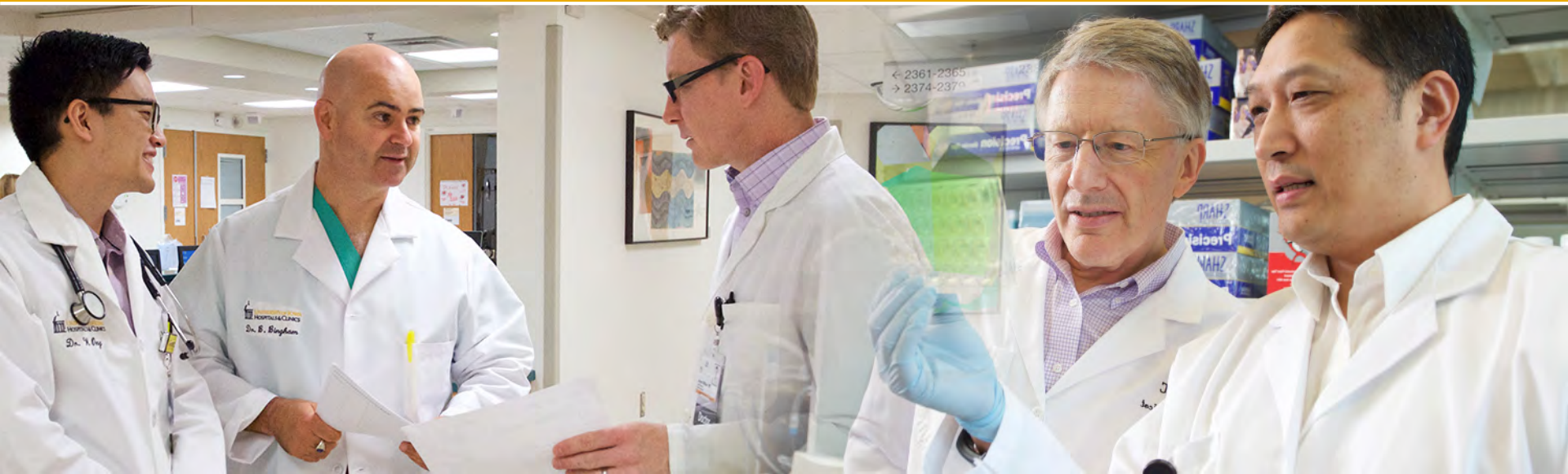
Agenda

Today's Presentation

Opening Remarks

Operating and Financial Performance

Faculty Presentation: Cystic Fibrosis Research at Iowa



OPENING REMARKS

*Brooks Jackson, MD, MBA
Vice President for Medical Affairs
& Dean, Carver College of Medicine*



OPERATING AND FINANCIAL PERFORMANCE

Bradley Haws, MBA

*Associate Vice President for Finance
& Chief Financial Officer, UI Health Care*

Mark Henrichs, CPA, MHA

*Assistant Vice President of Finance
& Chief Financial Officer, UI Hospitals and Clinics*

Volume and Financial Highlights – FY18

Through June 2018 (preliminary)

Operating Margin

- June year-to-date actual 3.6%, budget of 2.5%

Volume Growth

- Year-over-year: Inpatient 2.1%, Surgeries 3.5%, Clinic Visits 5.5%

Acuity

- Case Mix Index continues to be high – above 2.0 for all payers (2.13) and Medicare (2.23)

Census

- Many days above 90% occupancy
- 7 additional beds opened in January
- 2 more ORs to open in Children's Hospital in FY19
- Closer relationship with post-acute providers being developed

Length of Stay Index (through December)

- Adult at .90 – below the expected index of 1.0
- Pediatrics at 1.0 – at the expected index
 - much progress achieved over past several months

Readmission Rates (through December)

- Adult at 10.6% - below target of 12%
- Pediatrics at 10.5% - above target of 8.3%
 - Patients with multiple comorbidities and chronic illness

Revenues

- 2.5% above budget year-to-date

Payer Mix

- Medicare growth continues
- FY17: 35.7%, FY18: 37.3%

Accounts Receivable

- Positive trend for government and out-of-state payers
- Progress resolving older cases

Salary Expenses

- 3.3% below budget year-to-date

Non Salary Expenses

- 6.6% above budget year-to-date
- Implant and pharmacy costs

Volume - Highlights and Trends

Operating and Financial Performance

Inpatient Discharges

- Volume growth continues year over year – up 721; 2.1% compared to last fiscal year
 - All major clinical areas have grown year over year except Pediatric Medical & Surgical (down 3.1%) and Pediatric Psychiatry (down 14.5%)
 - Pediatric Medical & Surgical declines experienced in Hematology/Oncology and Cardiology. Review underway to understand key drivers.
 - Pediatric Psychiatry driven by our continued challenges to place these patients when they no longer require acute care
 - Compared to other AMCs, UIHC benchmarks at the 93rd percentile in terms of Acute Care Occupancy Percentage.
-

Surgical Cases

- Fiscal Year surgical case volume ended strong after a slow start in July
- Year to date, case volumes are up by 1,117 cases; 3.5% compared to the same time period last fiscal year
- All services experiencing growth except Otolaryngology/Head and Neck Surgery
 - decline driven by the departure of three faculty members. Two have been replaced with recruitment underway for the third. Preferred candidate has been identified.

Volume - Highlights and Trends

Operating and Financial Performance

Emergency Department Visits

- Compared to last fiscal year, visits continue to be down—2,925 visits; 4.8%
 - This decline is driven by:
 - lower acuity patients seeking care at other sites (i.e. Quick Care)
 - increases in psychiatry patients who require inpatient services when our psychiatry beds are often filled
 - days with very high inpatient census resulting in patients having to wait in the ED for admission
- New outpatient Crisis Stabilization Unit to open in October for patients requiring emergency psychiatric care
- Acuity of patients continues to increase – 34.9% are admitted compared to 33.6% last year
- Admissions through the Emergency Department make up 58% of all inpatient admissions

Volume - Highlights and Trends

Operating and Financial Performance

Length of Stay

- Continued improvement in our length of stay (12 month rolling average) for both adult and pediatric patients
 - Adult index continues to remain steady at 0.90.
 - Pediatrics index has improved from 1.03 last year to 1.0 this year
- Focused efforts on:
 - Documentation to ensure we accurately reflect the acuity of our patients
 - Discharge Preparation - working with outside facilities as well as patients and family members to transition them to the most appropriate setting post-discharge

Readmissions (All-cause 30 day)

- Adult patients readmission rates continue to perform well compared to AMC colleagues
- Pediatrics is above the benchmark; primarily driven by planned readmissions being included in the data set and patient transfers being counted as readmissions

Volume - Highlights and Trends

Operating and Financial Performance

Outpatient Visits

- Growth continues to be experienced year over year – up a total of 51,614 visits; 5.5% increase
- Increased volumes at all locations; main campus, Iowa River Landing (IRL) and off-site
- All services experiencing growth year over year except Family Medicine and General Surgery
 - The reported decline in General Surgery visits is due to the Vascular Surgery Clinic and the Vascular Ultrasound Lab moving to the new Heart and Vascular Center facility that opened in mid September 2017. Excluding the vascular patients, General Surgery Clinic visits are up year over year by 259 visits; 1.5%
 - Family Medicine is showing a year-over-year decline due to the closure of three of our Quick Care locations, one of which has now reopened, and one outreach clinic. Also experienced faculty turnover with recruitments underway.

Financials - Highlights and Trends

Operating and Financial Performance

Revenue

- Given the strong volume, year to date net revenue is 2.5% above budget
- Collections for the second half of the fiscal year will be impacted by \$6.5M of governmental payment reductions
- Significant collections of very old accounts receivable (AR > 270 days old) occurred in October – December of FY18. This was the result of diligent collection processes and structured communications with the Medicaid MCO's. This represents significant progress, but some challenges with collection efforts for this payer group still exists.

Expenses

- Salary expenses are 3.3% below budget, due to successes in the \$86M budget initiative plans
- Non-Salary expenses are 6.3% above budget, mainly due to supply and pharmacy expense. The expense increases are directly tied to increasing surgical volume and acuity, and specific pharmacy initiatives

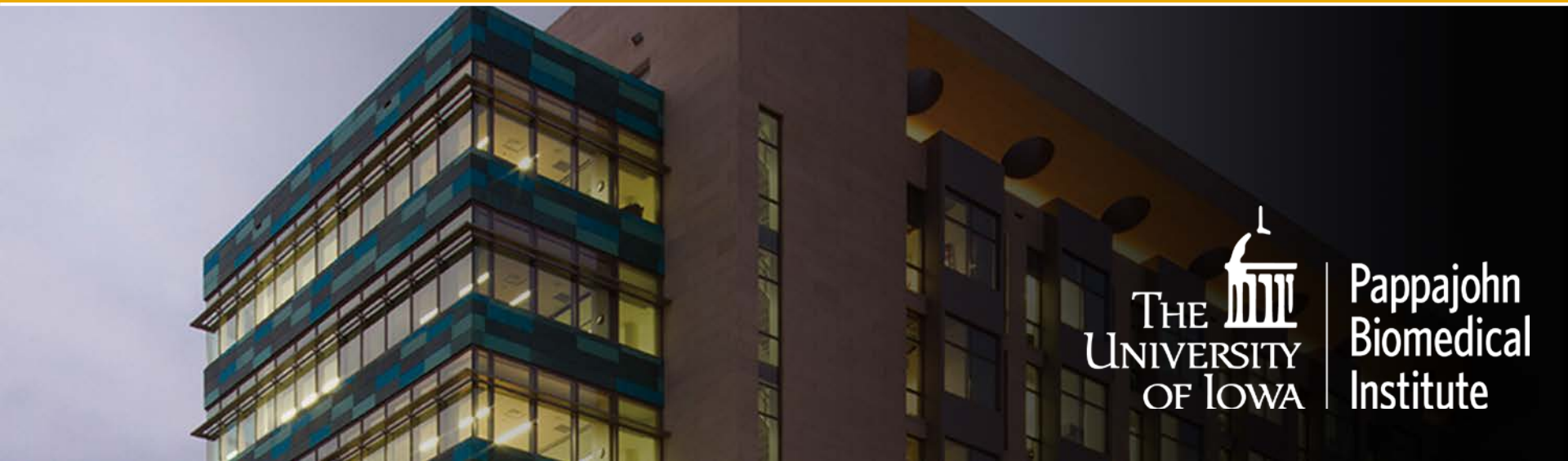
Financials - Highlights and Trends

Operating and Financial Performance

Update: \$86M Revenue Enhancement/Expense Reduction Initiatives

- Achieved good progress to date on our \$86M plan
- \$65.5M has been realized through June*; 75% of the year to date target
- Over half of the full year target is tied to reducing labor costs
- 500 FTE targeted savings – 500.6 FTEs achieved
- Goal to reduce agency nurses by 149 positions – 203 positions reduced through June. Replaced with UIHC nurses
- Progress continues to be achieved on revenue growth (\$22.1M) and non-labor expense reductions (\$3.2M). Examples include: PET/MRI expanded hours, pharmacy initiatives, contracts for virtual hospitalist services, supply reductions.
- Deferred the start of some capital projects and major equipment acquisitions. This has reduced capital spending this fiscal year by about \$60M.

**Some initiatives are not reported through June due to a lag in the data.*



FACULTY PRESENTATION: CYSTIC FIBROSIS RESEARCH AT IOWA

David A. Stoltz, MD, PhD

Director, Physician Scientist Training Pathway

Professor of Internal Medicine – Pulmonary, Critical Care and Occupational Medicine

Professor of Biomedical Engineering

Professor of Molecular Physiology and Biophysics

Lung Biology and Cystic Fibrosis Research Group

University of Iowa Pappajohn Biomedical Institute

Lung Biology & Cystic Fibrosis Research Group



Pappajohn
Biomedical
Institute



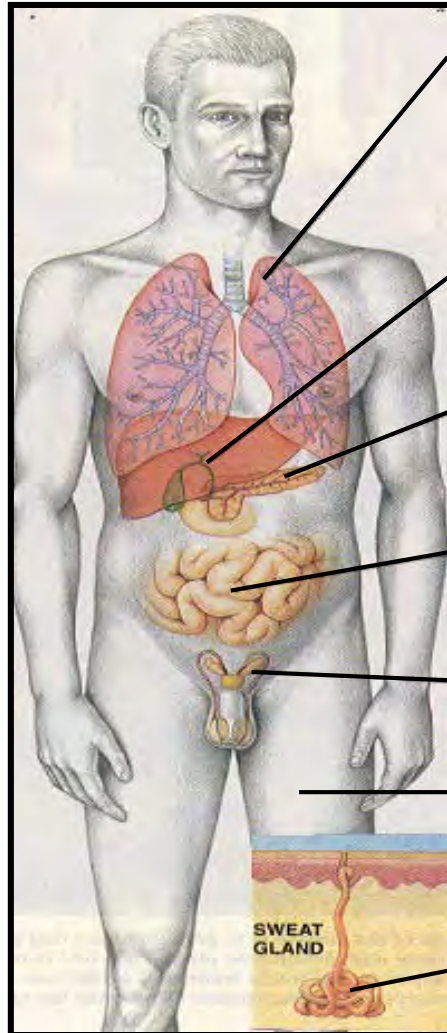
What is cystic fibrosis?

Cystic Fibrosis Research at Iowa

- Genetic disease - most common lethal, inherited disease in Caucasians
- Due to mutations in gene – “CFTR”
 - transports chloride and bicarbonate across cell membranes
- Autosomal recessive inheritance - 1 out of 25-30 individuals are carriers
- Affects 1 in 3,000 births and 30,000 people in the US with CF

CF Affects Nearly Every Organ System

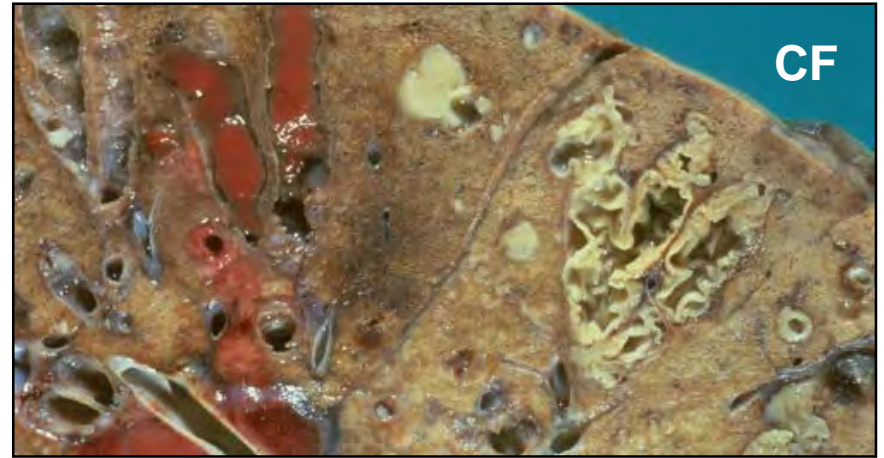
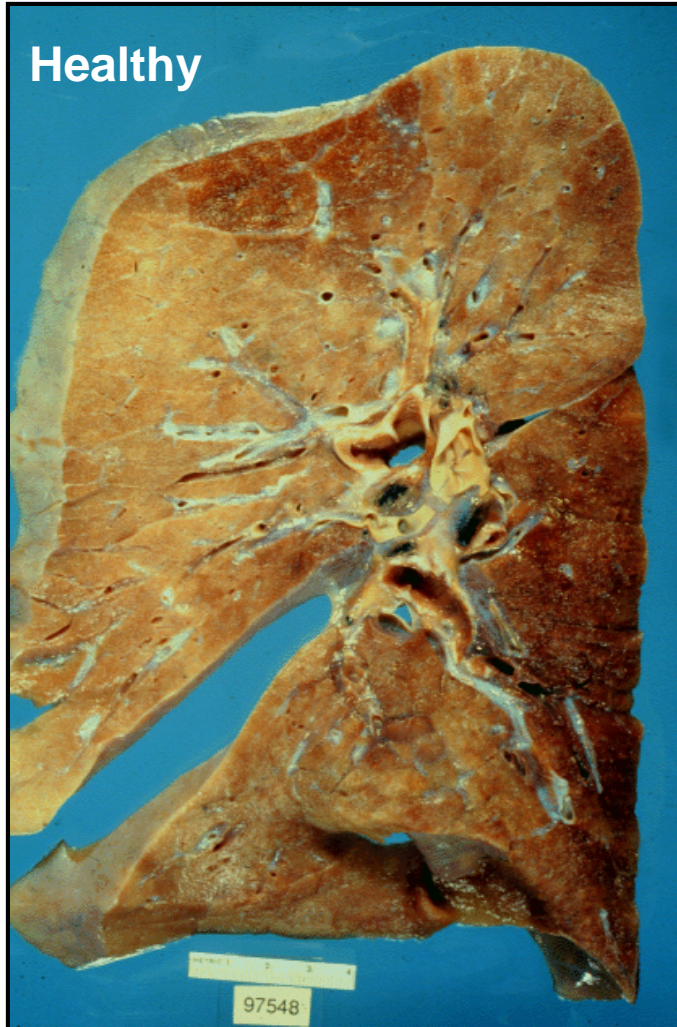
Cystic Fibrosis Research at Iowa



- Airways
infection, inflammation, mucus, respiratory failure
- Liver
cirrhosis
- Pancreas
no digestive enzymes, diabetes
- Intestine
intestinal obstruction
- Reproductive tract
infertility
- Bone
osteoporosis
- Sweat gland
salty sweat

CF Lung Disease

Cystic Fibrosis Research at Iowa



University of Iowa CF Care Center

Cystic Fibrosis Research at Iowa



- Accredited by the Cystic Fibrosis Foundation (CFF)
- Care for approximately 250 people with CF
 - 130 adults (≥ 18 yo) with CF
 - 120 children with CF
- Multidisciplinary care team



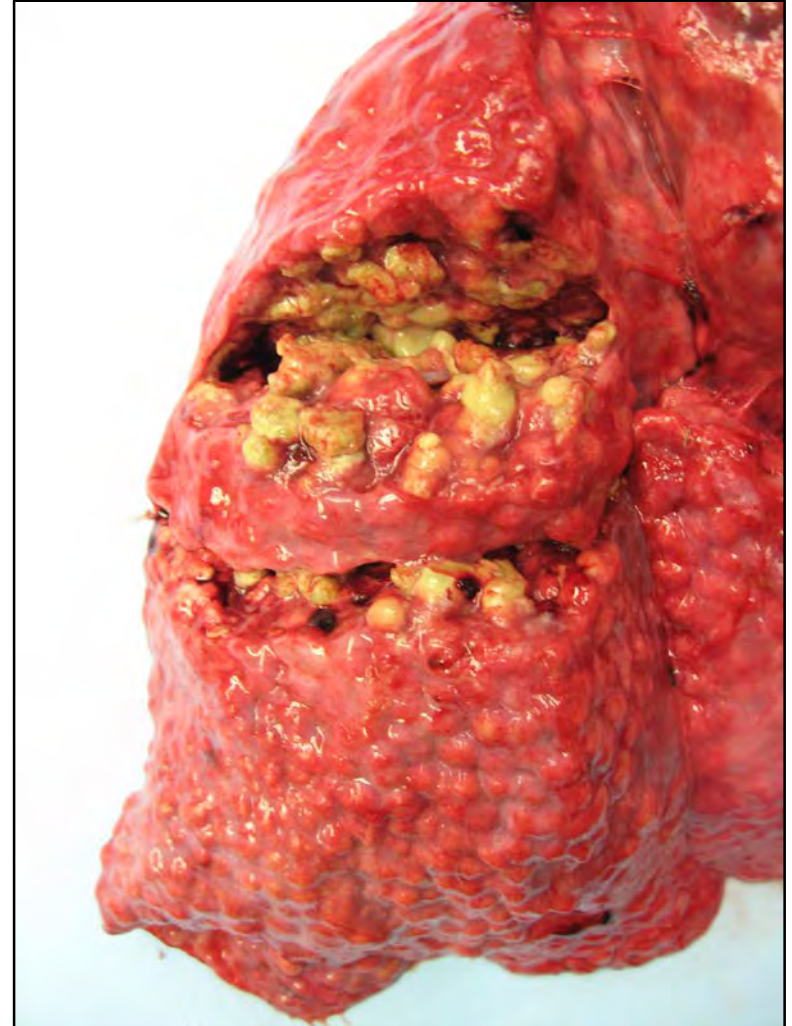
Average life expectancy 37 years old

Persistent Questions of CF Lung Disease

Cystic Fibrosis Research at Iowa

- What goes wrong in the CF lung?

Infection
Inflammation
Mucus

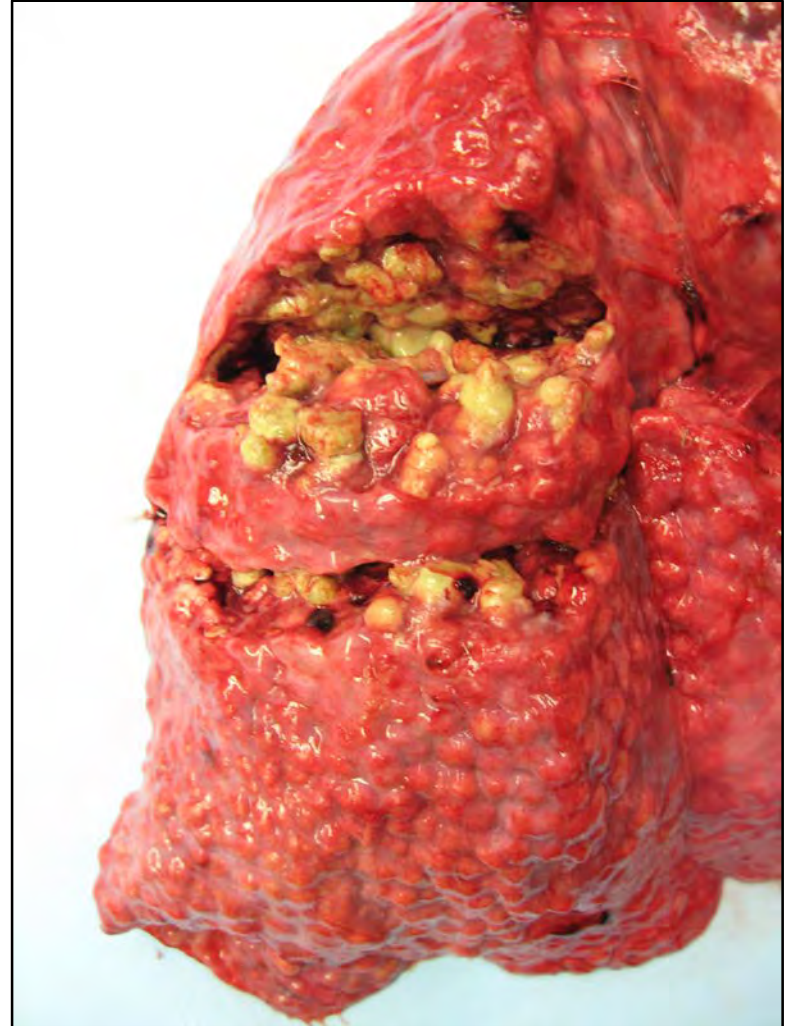


Persistent Questions of CF Lung Disease

Cystic Fibrosis Research at Iowa

- What goes wrong in the CF lung?
- Novel approaches to therapy?

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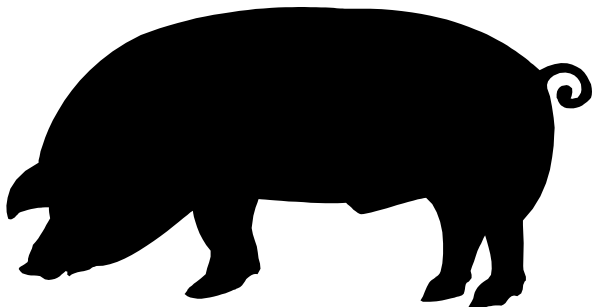


Persistent Questions of CF Lung Disease

Cystic Fibrosis Research at Iowa

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- Novel approaches to therapy?

Answers require an animal model.





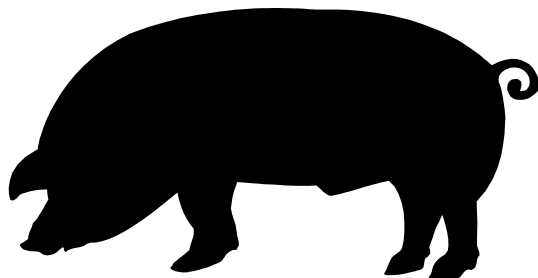
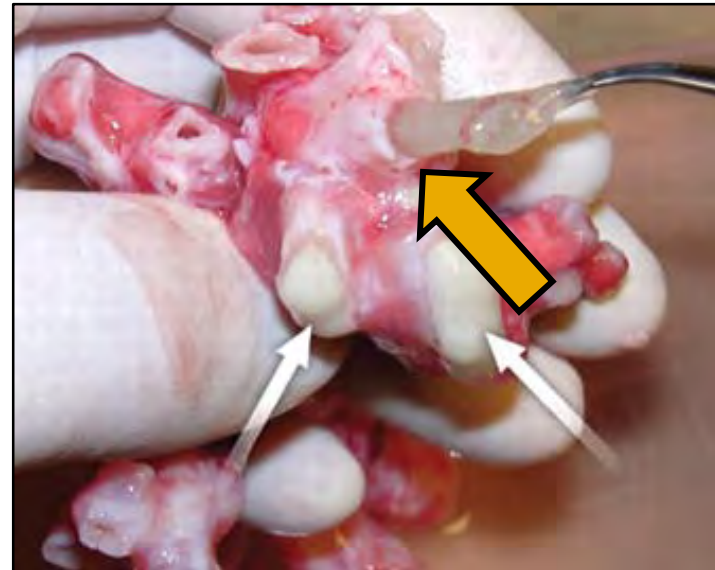
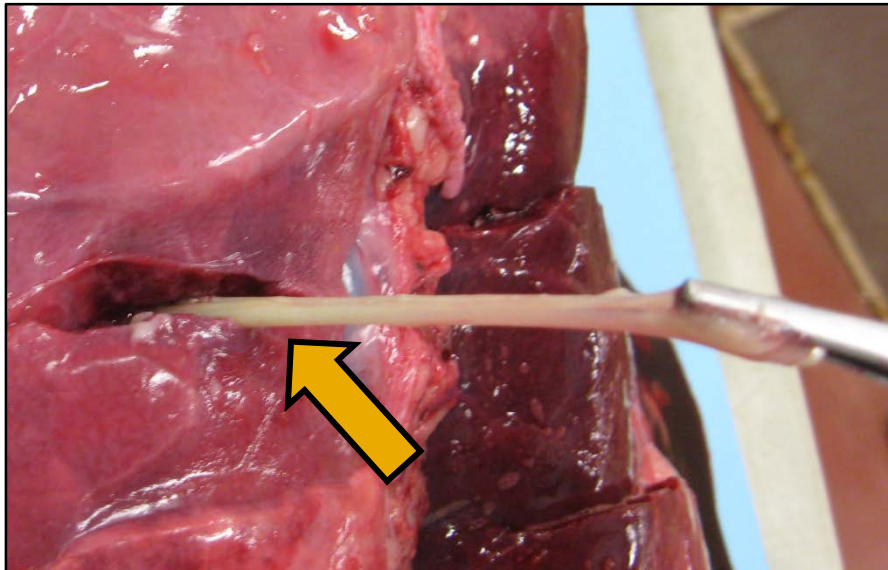
First litter of CF pigs

Cystic Fibrosis Research at Iowa



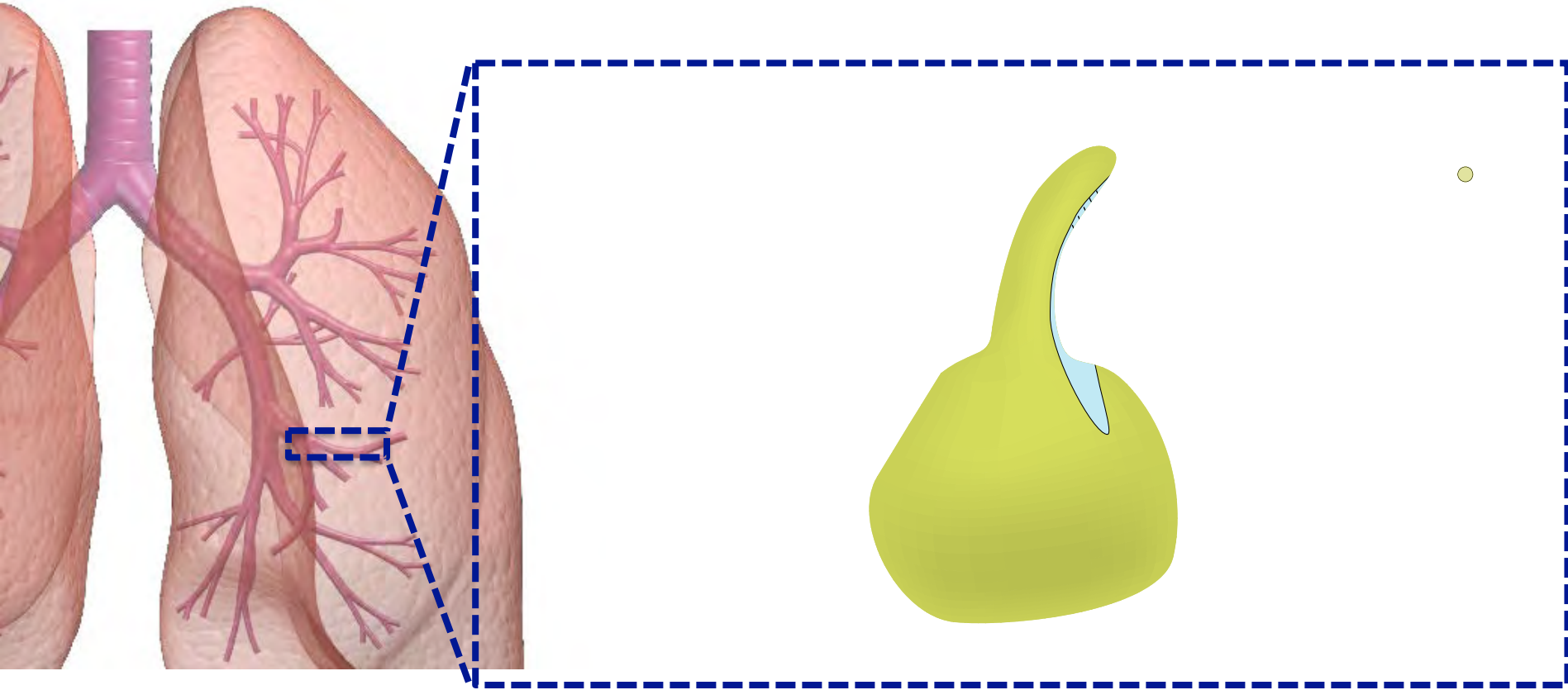
CF pigs develop lung disease

Cystic Fibrosis Research at Iowa



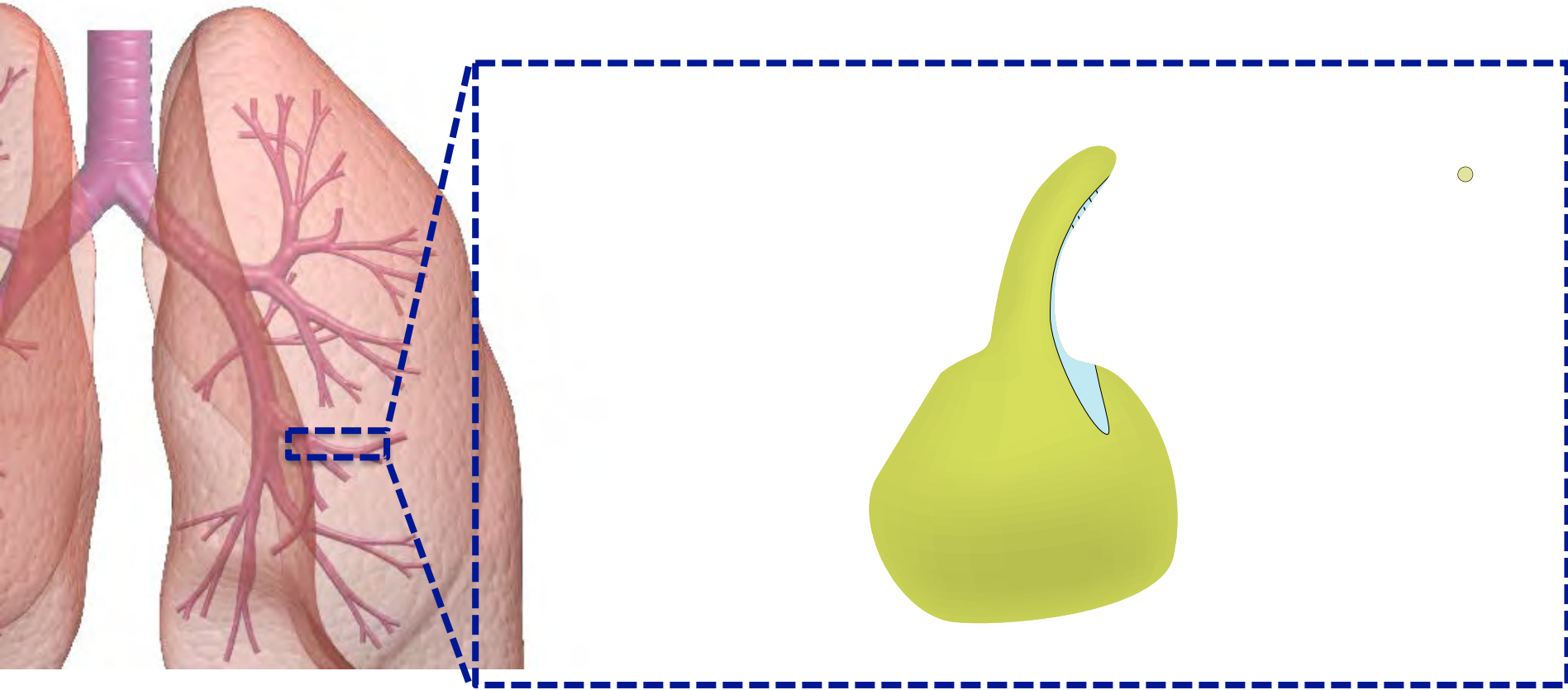
Mucociliary Transport

Cystic Fibrosis Research at Iowa



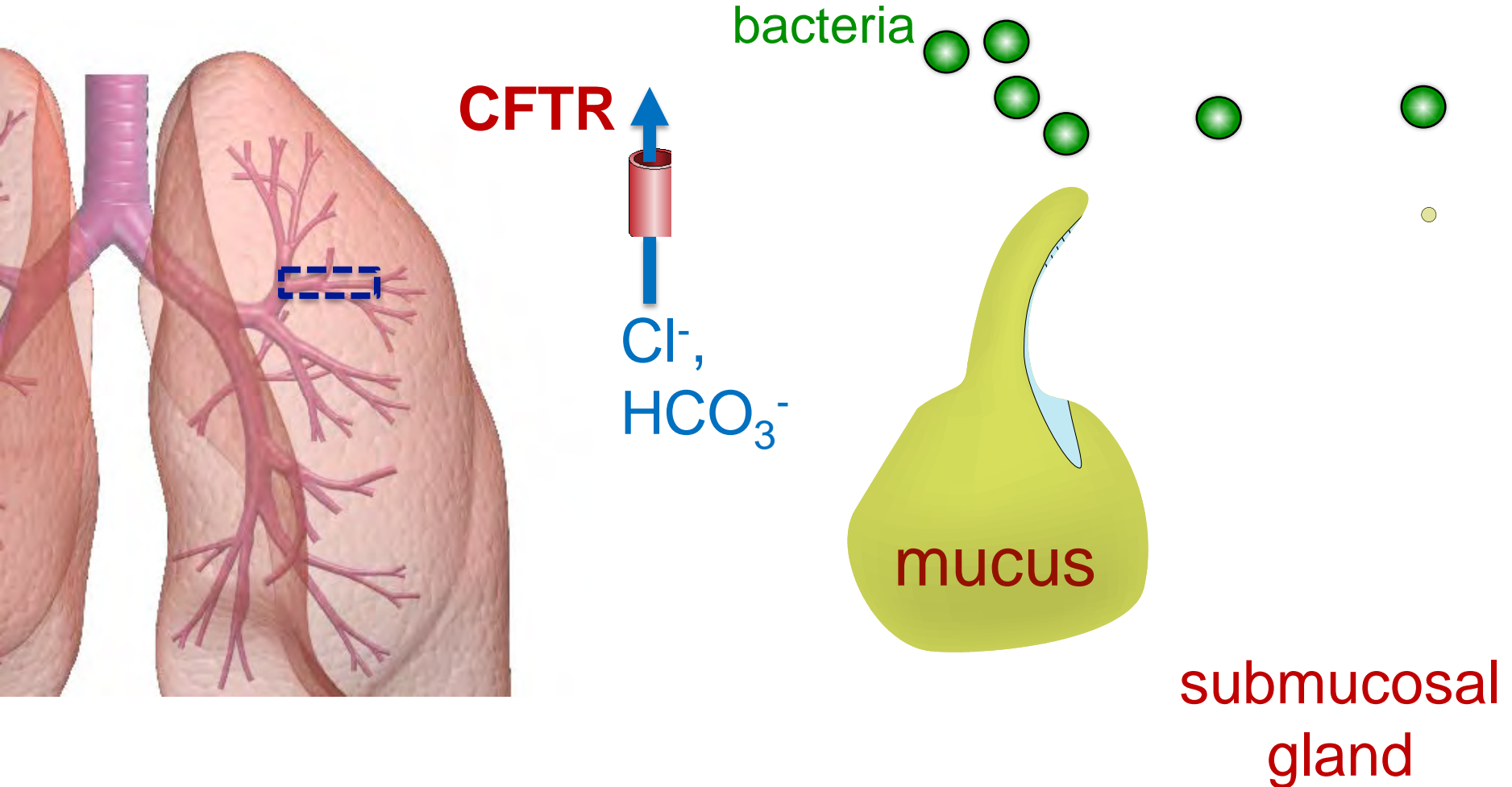
Mucociliary Transport

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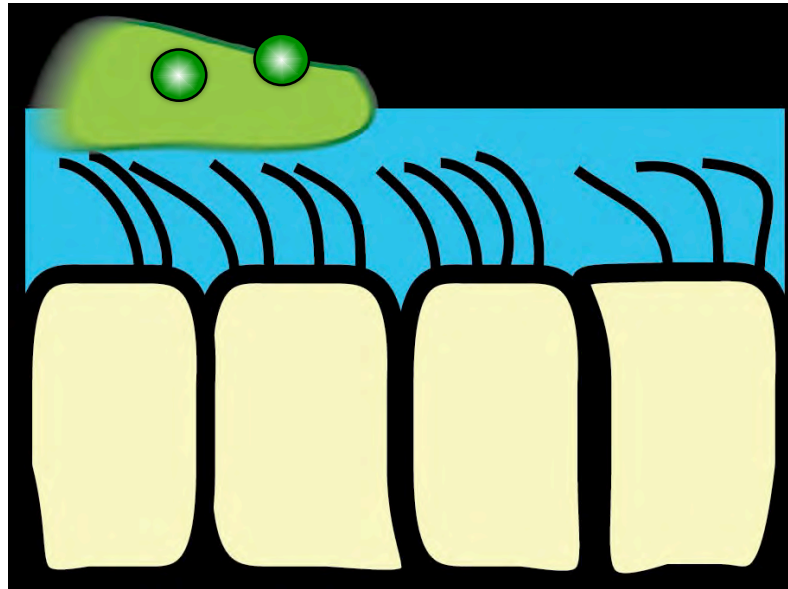
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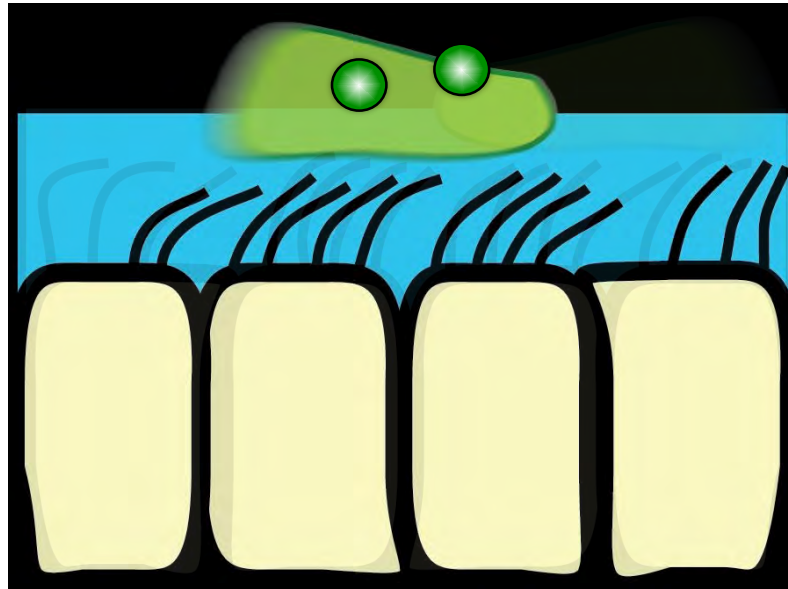
What is Mucociliary Transport?

Cystic Fibrosis Research at Iowa



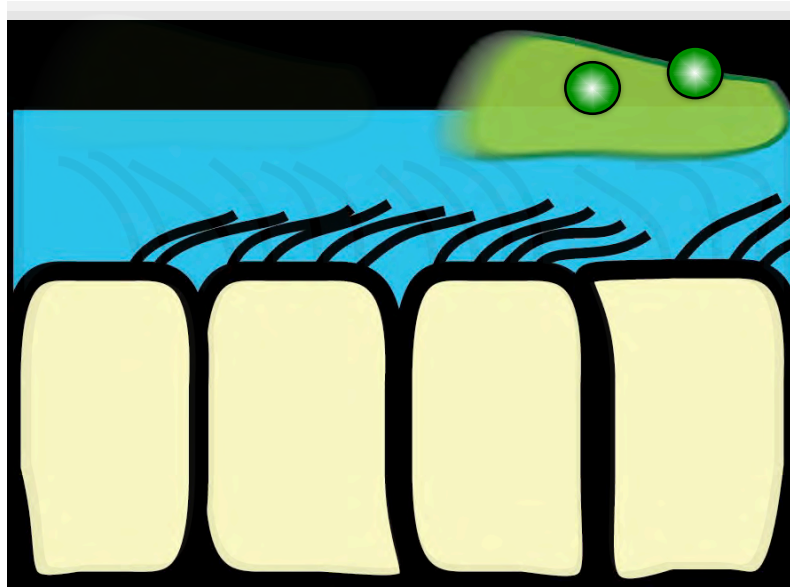
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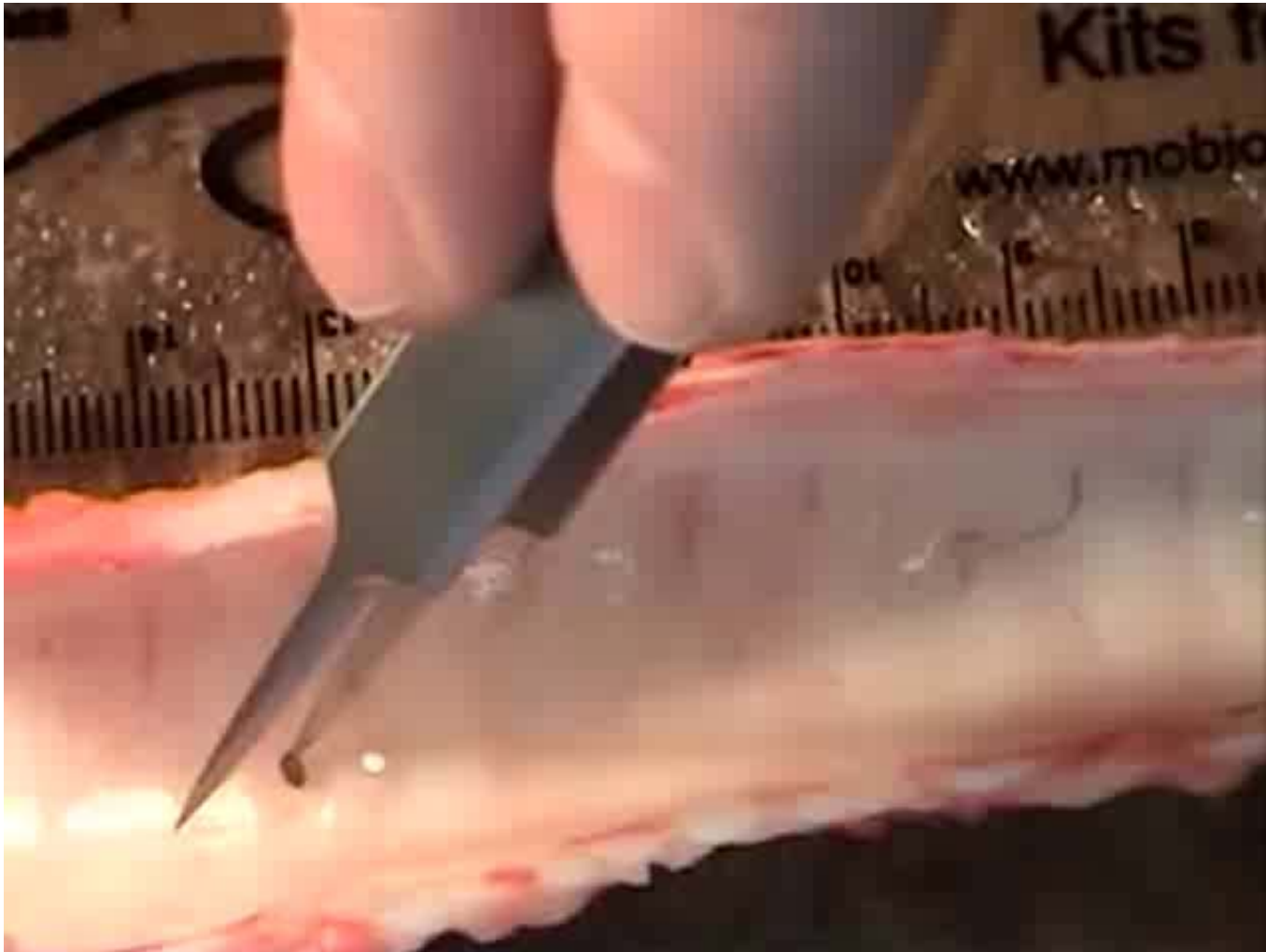
What is Mucociliary Transport?

Cystic Fibrosis Research at Iowa



Trachea (windpipe)

Cystic Fibrosis Research at Iowa



Measuring Mucociliary Transport



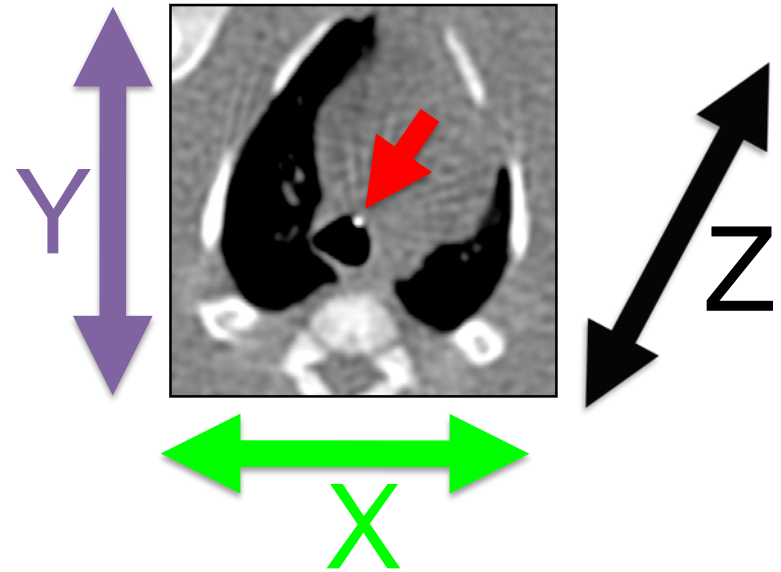
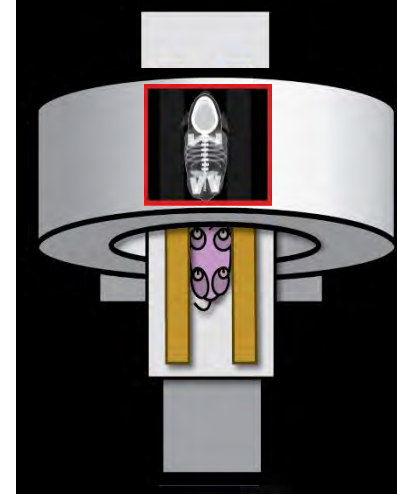
Iowa Comprehensive Lung Imaging Center

Measuring Mucociliary Transport

Cystic Fibrosis Research at Iowa



350 μm
tantalum
particles

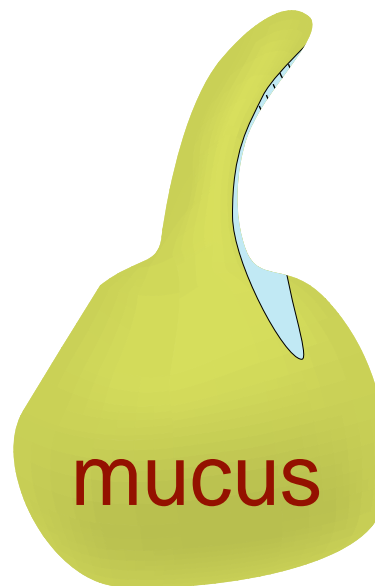
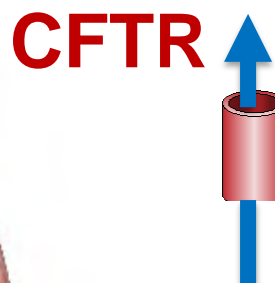
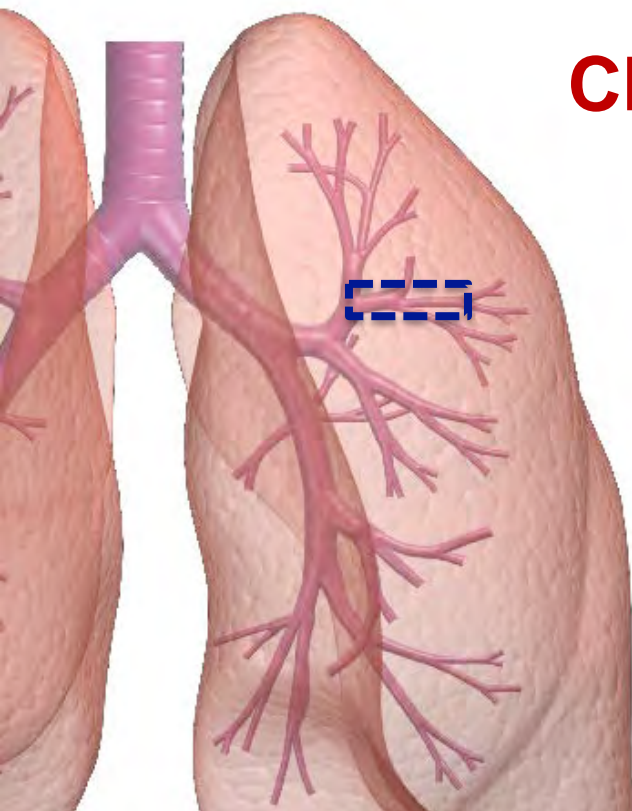


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Mucociliary Transport

Cystic Fibrosis Research at Iowa

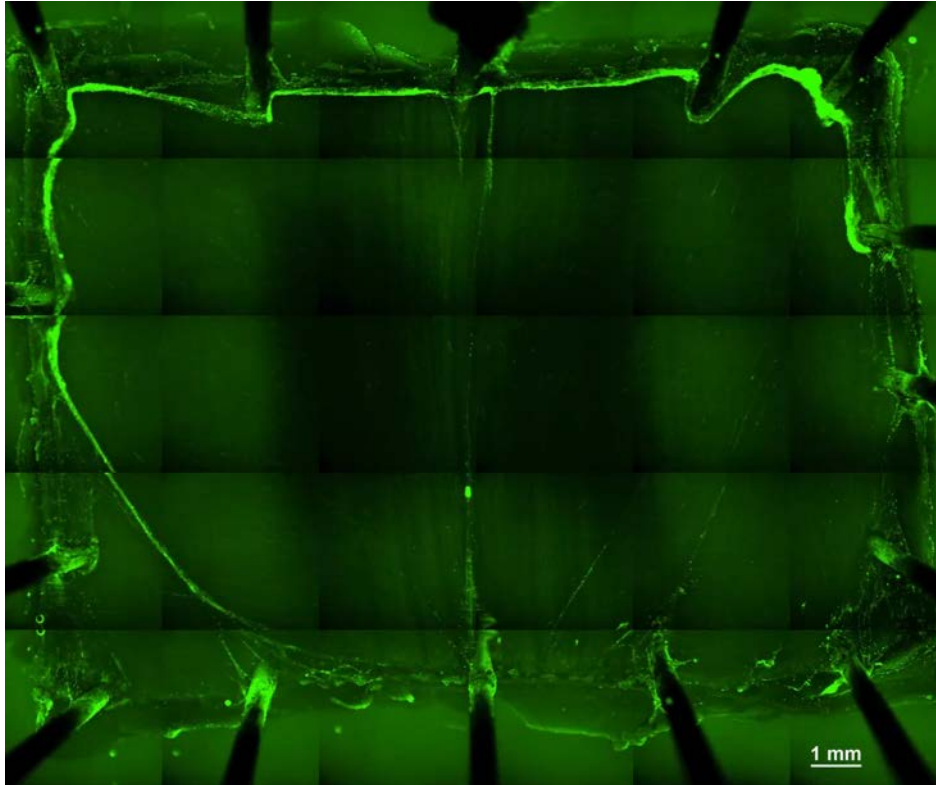


submucosal
gland

Mucus Becomes Stuck on CF Pig Airways

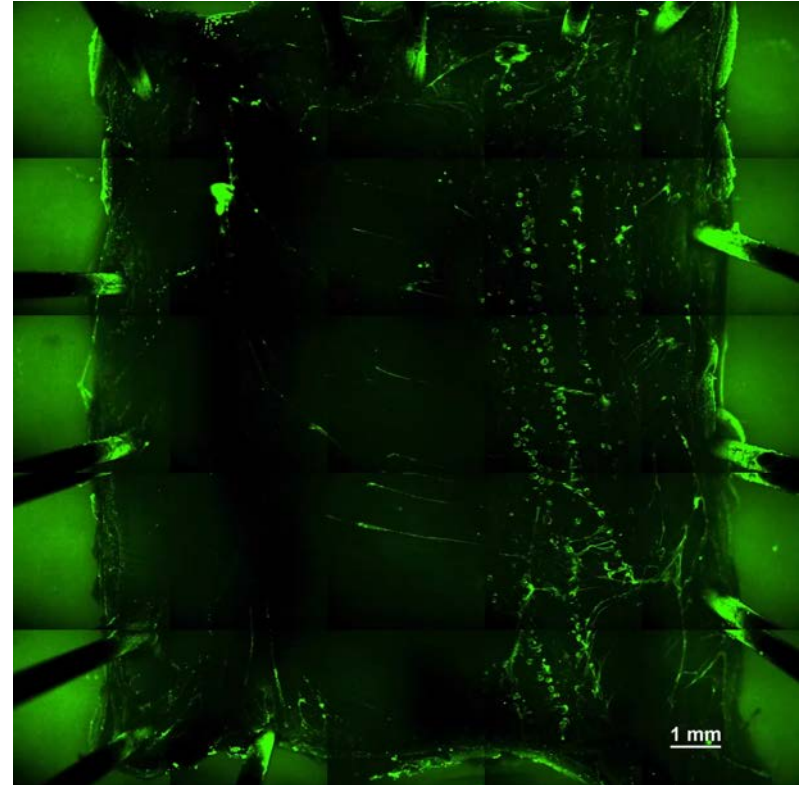
Cystic Fibrosis Research at Iowa

↑ mouth



Healthy

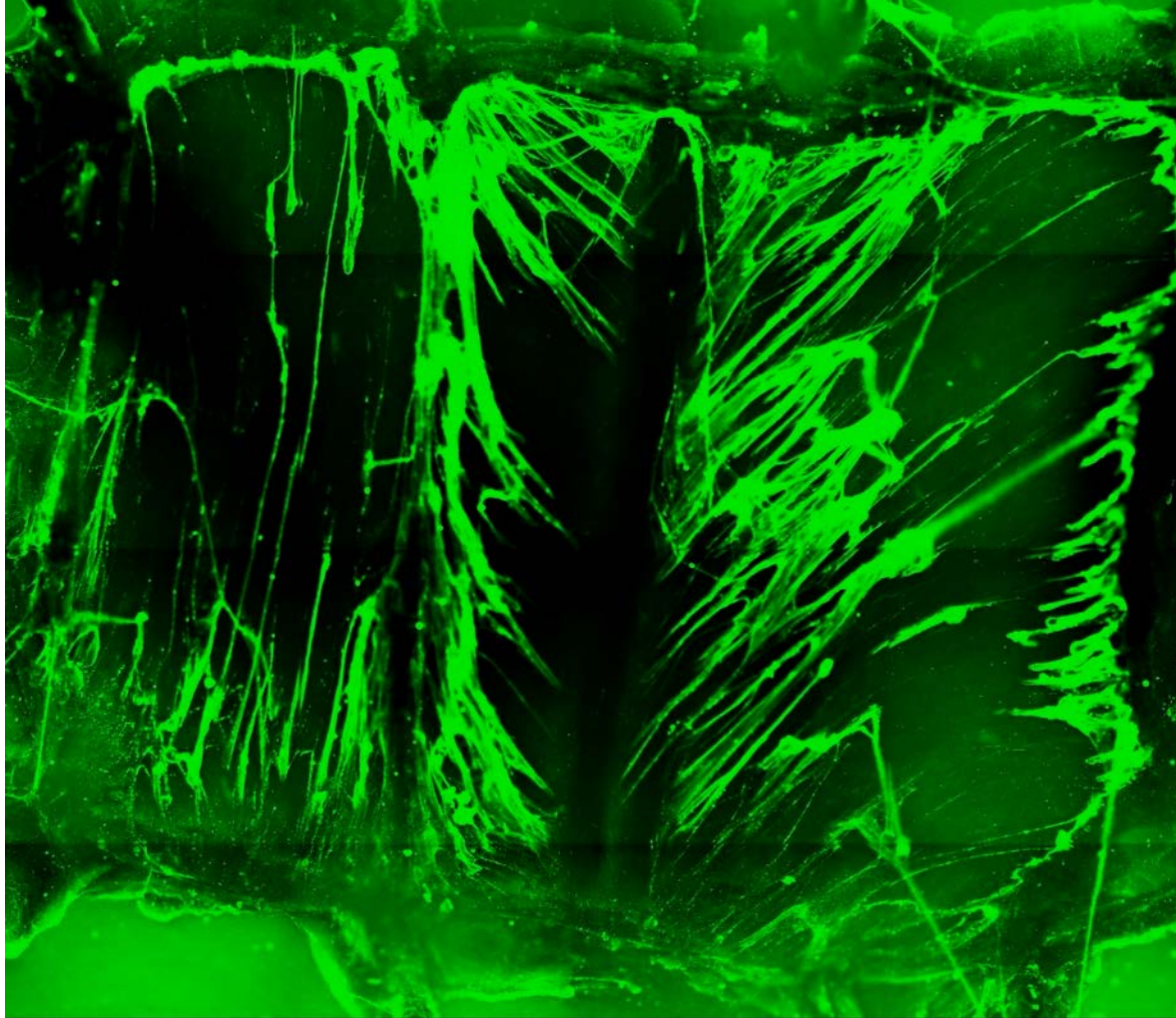
tail



CF

Release of Mucus Strands on CF Pig Airways

Cystic Fibrosis Research at Iowa



Recent Successes

Cystic Fibrosis Research at Iowa

- Grant Funding- NIH Program Project Grants (PPGs)
 - Disease Pathogenesis* (\$1.5M/y direct, \$0.75M/y indirect)
 - Gene Therapy* (\$1.5M/y direct, \$0.75M/y indirect)

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- **Biotech companies, IP, licensing**
Exemplar Genetics and Talee Bio

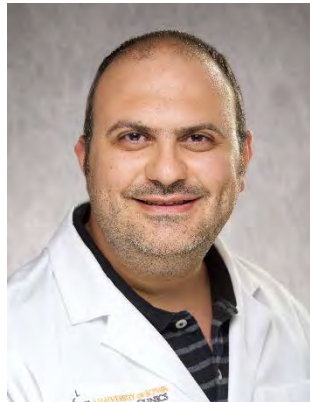
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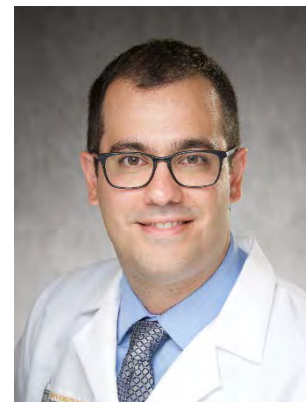
**Robert
Blount, MD, PhD**



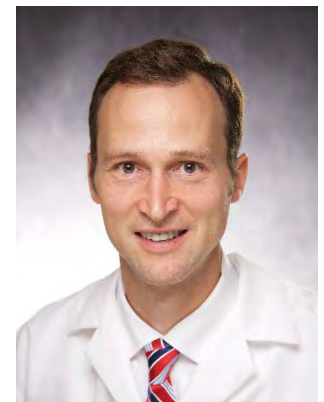
**Mamoud
Abou Alaiwa, MD**



**Josalyn
Cho, MD**



**Alejandro
Pezzulo, MD**



**Tony
Fischer, MD, PhD**

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- Recruitment of junior faculty
- Dr. Michael Welsh receives Alpert Award

Recent Successes

Cystic Fibrosis Research at Iowa

2018 Warren Alpert Foundation Prize Recipients



Francis Collins
NIH Director



Lap-chee Tsui
Academy of Science of
Hong Kong



Bonnie Ramsey
University of
Washington



Michael Welsh
University of Iowa



Paul Negulescu
Vertex
Pharmaceuticals



Recent Successes

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- Recruitment of junior faculty
- Dr. Michael Welsh receives Alpert Award
- The face of CF is changing

Cystic Fibrosis Research at Iowa



Thank You

University of Iowa Health Care

Lung Biology & Cystic Fibrosis Research Group



Pappajohn
Biomedical
Institute

