

# Pediatric Pulmonology Fellowship University of Washington/Seattle Children's Hospital

## Program Overview/Introduction

**Jonathan D. Cogen, MD, MPH (Fellowship Program Director)**

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**Ronald L. Gibson, MD, PhD (Fellowship Program Associate Director)**

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**Becca Smith, MBA (Fellowship Program Coordinator)**

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**Updated March 2023**



# Mission Statement

“Train pediatric pulmonologists from diverse backgrounds to be skilled clinicians with a foundation in physiology, critical thinkers, avid teachers, and who improve care via scholarship and programmatic development”

*and have FUN during the experience!*



Mt. Rainier (visible from Seattle)

# Equity, Diversity, and Inclusion (EDI)

- We at Seattle Children's Hospital and in the Pediatric pulmonary division strive to create an environment inclusive to all people, patients, and families regardless of background or life experiences
- Seattle Children's Hospital leadership has a diversity and inclusion council to review organization's strategies, policies, and practices
- Pulmonary-specific EDI task force has ongoing projects
- Equity, Diversity and Inclusion (EDI) training is ongoing at Seattle Children's Hospital, the University of Washington and within our Division
- We have enhanced our EDI training curriculum via seminars, lectures, and dedicated journal club topics, and we collaborate with graduate medical education at University of Washington
- For more information related to how UW GME is addressing EDI, please visit: <https://sites.uw.edu/uwgme/equity-diversity-inclusion/>



# Division Head: Dr. Terri Laguna!

- MD from UC-San Francisco, pediatric residency/chief residency at Seattle Children's/Univ of Washington, pulmonary fellowship at Univ of Colorado
- Clinical and research interests in CF (independently funded investigator with NIH and CF Foundation support)
- Loves to teach! (has won five pediatric resident teaching awards in 14 years)
- As an underrepresented minority in medicine, passionate about DEI-related activities
- Overall goal includes advancing pediatric science and DEI initiatives through her leadership platforms





Blair Mockler  
7/7/2023-7/6/2026  
Year 1



MacKenzie Wyatt  
7/7/2023-7/6/2026  
Year 1



Drake Bouzek  
7/7/2022-7/6/2025  
Year 2



Rebecca Spurr  
7/7/2022-7/6/2025  
Year 2



Ashley Han  
7/7/2021-7/6/2024  
Year 3



Courtney Gallagher  
7/7/2021-7/6/2024  
Year 3

# 2023-2024 Fellows



**Seattle Children's**<sup>®</sup>  
HOSPITAL • RESEARCH • FOUNDATION

# Blair Mockler, MD

## (First Year Pulmonary Fellow)

- From Fort Worth, TX
- Medical school at Baylor College of Medicine
- Residency at Seattle Children's Hospital/University of Washington
- Clinical/research interests include the impact of climate change on respiratory health and medical education
- Loves hiking, camping, backpacking, skiing, reading and paddleboarding
- Enjoys exploring new restaurants in Seattle



# MacKenzie Wyatt, MD

## (First Year Pulmonary Fellow)

- From Mt. Sterling, KY
- Medical School: University of Kentucky (Go Cats!)
- Residency: Vanderbilt Children's Hospital
- Research/Clinical Interests: Advocacy in health inequities, PFT research, cystic fibrosis, complex care
- Passionate about DEI in medicine
- Enjoys singing, playing her ukulele, musicals/concerts, painting



# Drake Bouzek, MD

## (Second Year Pulmonary Fellow)

- From Cedar Rapids, IA
- Medical School: University of Iowa
- Residency: Riley Hospital for Children (Indiana University - Indianapolis)
- Research/Clinical Interests: cystic fibrosis, asthma, PCD, lung host-pathogen interactions
- Enjoys spending time with his family (wife + 2 daughters), playing basketball, hiking, and playing alto saxophone
- Loves watching sports and is a HUGE fan of the Iowa Hawkeyes, St. Louis Cardinals, and St. Louis Blues





# Rebecca Spurr, MD

## (Second Year Pulmonary Fellow)

- From St. Paul, MN
- Residency at Seattle Children's Hospital/University of Washington
- Clinical/research interests include asthma, lung health in resource-limited settings, and the impact of climate change on respiratory health
- Loves running, hiking, biking, camping, paddleboarding, and playing with other people's dogs



# Courtney Gallagher, MD

## (Third Year Pulmonary Fellow)

- From Austin, TX
- Residency at Texas Children's Hospital
- Worked as a hospitalist in the Texas Children's PICU for almost 3 years after residency
- Research/clinical interests include congenital diaphragmatic hernia, pulmonary hypertension, and medical education
- Loves to bake, hike, visit National Parks (picture to the right from Bryce Canyon), and try new restaurants





# Ashley Han, MD

## (Third Year Pulmonary Fellow)

- Born in Hawaii, but grew up in Tacoma, WA
- Residency and chief year at Loma Linda Children's Hospital
- Research/clinical interest includes cystic fibrosis and social determinants of health in medicine
- Enjoys movies, exploring different cuisine, and hanging out with family





# Becca Smith

## Pulmonary Fellowship Coordinator

- Born in San Diego, been in the area since high school
- Education: University of Washing BA in Public Health and Western Washington University MBA
- Worked 2 years at Virginia Mason Medical Center as a Residency and Fellowship Program Coordinator
- Joined the Pulmonary Fellowship in May 2022
- Enjoys Family time, movies, walks, farmers markets, animals, eating different cuisine's, baseball games and traveling



# Jonathan Cogen, MD, MPH

## Program Director, Pulmonary Fellowship

- Born in San Francisco (diehard 49ers Fan!), medical training in Washington DC, Chicago, and Seattle
- Clinical interests include antimicrobial stewardship in pediatric respiratory health (focus on CF and trach/vent population) and effects of climate change on respiratory health; very interested in medical education
- Expertise in performing comparative effectiveness studies and observational research; background in epidemiology, biostatistics, and study design
- Love sports (Arsenal, Chicago White Sox), a good IPA, alternate between reading presidential biographies and epic fantasy/sci-fi novels, favorite TV shows include Parks and Recreation and Seinfeld
- Hate olives and beets, love chocolate mousse and Chicago-style Pizza



# Ron Gibson, MD, PhD

## Associate Program Director, Pulmonary Fellowship

- Seattle native
- CF center director, Co-Director of the Seattle CF Therapeutics Development Center, Co-Director of the Clinical Core of the UW CF Research Development Program
- Clinical Interests: Care of children with CF and trach/vent dependence, love mechanisms of disease and physiology
- Education: Love teaching (small group) and mentoring
- Research: Airway infection in people with CF, recent focus on genetic modifiers of airway infection in CF
- Hobbies: Love sports (Man United, UW athletics), former passionate road cyclist, hiking, beachcombing, gardening, and traveling
- Dark chocolate is essential to my survival!





# Fellowship Orientation

- Meet with Program Director (PD)/Associate PD (frequent check-ins first month)
- Meet and have frequent check-ins with Senior Fellow(s) for “real orientation”
- Introductory On-Boarding/Educational Sessions
- Lectures from Faculty content experts on broad topics in first few months
- Flexible bronchoscopy and “home ventilator” intro starts in first 2 weeks
- Shadowing expert Respiratory Therapists begins in first few months
- Meet with all Staff and Faculty Members in first 3 months
- Review Fellowship Share Drive for Key References/Guidelines
- Review Pediatric Pulmonology Core Curriculum/Rotation Objectives

**Happy hours, potlucks, team building-activities!**

# Clinical Centers at Seattle Children's Hospital

- Pediatric Sleep Center
- Cystic Fibrosis
- Primary Ciliary Dyskinesia
- Bronchopulmonary dysplasia (BPD)
- Pulmonary Hypertension (Cardiology Lead)
- Aerodigestive
- Neuromuscular
- Multidisciplinary sickle cell clinic
- Spine/Thoracic Insufficiency
- Home Ventilator
- Congenital Diaphragmatic Hernia/Lung Hypoplasia
- Regional clinics (North and East Seattle suburbs, South Seattle)
- Outreach clinics in Eastern WA and Alaska

Fellows can attend (and should!) all clinics during their three years of fellowship to gain exposure to a breadth of pediatric pulmonary conditions

# Clinical Training

## Year 1 Inpatient Activities (see objectives in fellowship curriculum)

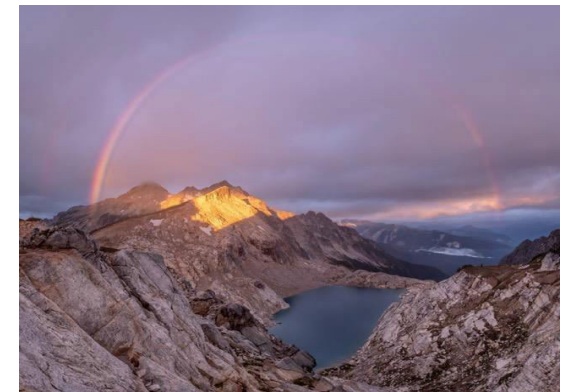
- 14-18 weeks of inpatient or consult service- most do 16 weeks in 1-week blocks
  - Mixture of TEAM 4 Pulm Service and two separate PULM Consult Services
    - Consult 1 (primarily ICUs), Consult 2 (primarily wards/ER/outside calls)
    - PULM Service Fellow covers weekend for both Service and Consult teams
  - Night Call (**VERY unique aspect of our fellowship**):
    - Weekend PM call by service fellow/attending
    - Weekday PM call from 7 PM-7 AM each night by “off-service” colleagues (Mon-Fri)
    - Year 1 Fellows included in Weekday PM night call pool starting in ~ January of Year 1
    - This systems provides time off (pager-free!) overnight while working on-service
- 2-week rotation on introduction to Ventilators/Respiratory Therapists (no PM call)
  - Focus on learning ventilator modes/set-up on lung model, shadow senior RTs in ICU/Ward
- 2-week Cardiology Consult Service Rotation (no PM call)
  - Focus on cardiopulmonary interactions and care of children with complex congenital heart disease



# Clinical Training

## Year 1 Outpatient Activities

- 4 weeks of SLEEP Medicine (may be divided into 2 two-week blocks)
- ½ Day/Week of continuity clinic when not on inpatient service
- Minimum of ½ Day/Week of Sub-Subspecialty Pulmonary Clinics when not on service
  - List of clinics: neuromuscular, trach/vent, CF, pulmonary HTN, spine, aerodigestive, congenital diaphragmatic hernia/lung hypoplasia, BPD, primary ciliary dyskinesia, sleep medicine, multidisciplinary sickle cell clinic
  - Schedule 1 week in advance on Fellows Calendar
- Outreach Clinics (e.g., Alaska, Wenatchee)- exposure at least once over 3 years
- Regional Clinics (e.g., Bellevue, Everett, Federal Way)- exposure at least once a year



Reflection Lake,  
Mt Rainier National Park

# Flexible Bronchoscopy Training (Years 1-3)

- Hands-on bronchoscopy simulation training during orientation with bronchoscopy director Dr. Matt Abts
- Opportunities to perform bronchoscopies:
  - While on TEAM 4 and Consult services
  - Block aerodigestive OR days (at least once weekly) for “triple-scopes” (pulmonary, OTO, and GI)
- Become proficient in performing sleep endoscopy, bronchoscopy with bronchoalveolar lavage, and tracheoscopy
- Attend complex airway multidisciplinary case conference (twice/month) to discuss complicated cases with general/thoracic surgeons, OTO, and pulmonary radiologists



Dr. Spurr in the middle of an 8-bronchoscopy day!

# Clinical Training (Years 2 and 3)

- Inpatient Rotations: 8 weeks/year (mixture of service and consult services)
  - May do additional weeks in Years 2 and/or 3 per fellow interest
- Outpatient Rotations:
  - ½ day continuity clinic/week when off-service
  - Minimum of 1-2 sub-specialty clinics/month when off-service
  - Individualized exposure to additional outreach and regional clinics



Pike Place Market, Downtown Seattle



# Clinical Conferences/Meetings (Years 1-3)

- Journal Club (or Intermittent Works in Progress)
  - Weekly: Fellow's present ~ once every other month (4-5 for first-year, 2-3 for second/third years)
- Radiology/Pathology Conference
  - Monthly with Drs. Otjen, Romberg and Deutsch- Year 1 fellows lead case introductions
- Pulmonary Physiology Discussion Group
  - Core physiology syllabus for curriculum (meets 1-2 times/month)
  - Mixture of didactic sessions and cases
- Pulmonary Function Testing (PFT) Interpretation Curriculum
- Western States Clinical Conference
  - Monthly teleconference with ~ 10 programs, Year 1 fellows present x 1
- Divisional Meetings- weekly with varied topics
- Complex pulmonary case conference-meets weekly
- Fellows College Curriculum
- Pediatric Pulmonary Center Curriculum
- Individual research meetings with colleagues and mentors

# Teaching/Didactics

- Fellowship Education Committee (PD, APD, two senior fellows)
  - On-boarding education, lectures, list of key papers/reviews/guidelines of care
- Fellows as Teachers
  - Case-based teaching during inpatient team rounds
  - Case-based teaching for elective residents and students
  - Chalk-Talks during inpatient rotations (1-2 times/week on service)
  - Lectures to Pulm Nurse Practitioners and Respiratory Therapists
  - Journal Club/Works in Progress talks
  - Oral or Poster Presentations at Regional or National Meetings
  - Fellows participate in a regional problem-based learning curriculum with fellows from other programs on the West Coast
- Lectures for Fellows
  - Journal Club/Works in Progress talks by Faculty
  - Fellows core lecture series- twice a month

# Conference Attendance

- Dedicated funding available for fellows to travel to at least one conference per year
- Fellows are encouraged to submit abstracts describing their research
- Example conferences:
  - American Thoracic Society (ATS) Meeting
  - North American CF Conference (NACFC)
  - PCD Foundation Conference
  - Chronic Lung Disease Conference
  - Chest Annual Meeting
  - Pediatric Academic Society (PAS) Meeting
  - Seattle Children's Hospital Fellow and Resident Research day





# Tracking- Arghhh!

- ACGME requires fellows logging weekly duty hours by activity
  - Becca will work with you on this
  - One goal is to ensure no work hour violations
  - Use Med Hub database
- Keep Flexible Bronchoscopy Log
- Keep Weekly Cores Sign-out Sheets to evaluate breadth of clinical exposure and expose areas of deficiency/focus for future
  - See ACGME clinical areas of focus in Peds Pulm Curriculum,
  - Kept on Shared Pulmonary Drive



Space Needle and Climate Pledge Arena (Home of the Seattle Kraken NHL Team)

# Research (The Discovery is FUN!)

- Identify area of interest in first 6 months
  - Basic, translational, clinical, QI are all available
  - Meet with Program Directors and Specific Faculty to identify focus area
  - We can guide you to non-divisional faculty
- For those with interest in Clinical Research (recommend additional coursework):
  - MS or MPH Program at UW with application due in December of Year 1 (60 credits)
  - Maternal Child Health Certificate at UW (15 credits) or Biostatistics Certificate
  - Auditing of specific courses in biostatistics and epidemiology
- Formulate Scholarship Oversight Committee/Identify Mentors by the end of Year 1
  - At least 3 voting members, Program Director or Associate Program Director is Ad Hoc
  - At least 1 voting member must be from outside the Division
- At minimum, complete ABP-approved Scholarly Work Product to be eligible to take “the boards”
  - Master’s Thesis, Peer-reviewed publication with significant role, Extramural grant award, unpublished progress report for complex project (see ABP website)

# Examples of Past/Present Fellow Research Projects and Possible Funding Opportunities

Select example of research projects for recent graduates:

- Chelsea Davis (Steroid Use in the Treatment of CF Pulmonary Exacerbations) (2021)
- Sarah Hofman DeYoung (Home Airway Safety Events in Tracheostomy-Dependent Children) (2021)
- Leah Nuss (Transition to Home Ventilators in Patients with Central Airway Malacia) (2022)
- Holly Vo (Decision-Making for Pediatric Home Ventilation) (2022)
- Weston Powell: Airway Epithelial Circadian Rhythms in Pediatric Asthma and Viral Infections (2023)
- Georgene Hergenroeder: Impact of Trikafta on Serum Markers of Fat-Soluble Vitamin Levels in CF (2023)

Examples of possible funding opportunities that have been successful:

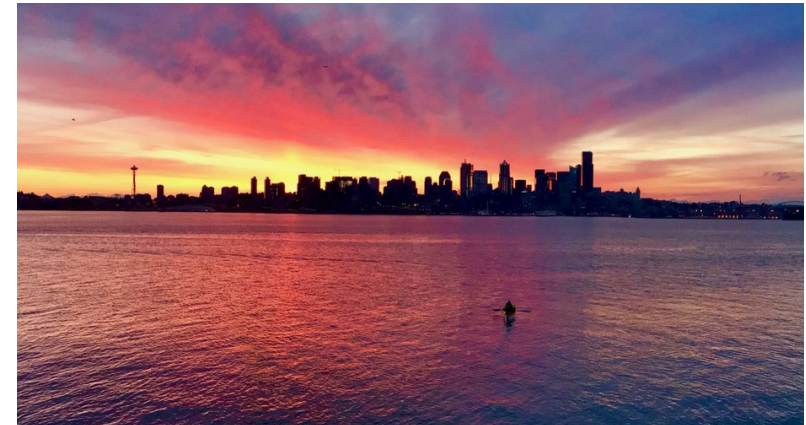
- CF Foundation Training Grants ([website](#))
- Early Career Awards from Thrasher Research Fund ([website](#))
- Firland Foundation Research Grants ([website](#))
- Arthur Rosenfeld Endowment (specific to pediatric pulmonary fellows at Seattle Children's)



# Evaluations

- ACGME Milestone Evaluations of Fellows every 6 months
  - Officially twice yearly by Faculty, yearly by other disciplines
  - 6 ACGME competencies from novice to expert (1-5)
  - Additional pulmonary specific measures (e.g., physiology, bronchoscopy)
  - Clinical Competency Committee reviews scores and comments; makes recommendations on progress/goals
  - Annual In-Site Peds Pulm Practice Sub-Board Exams
  - Review strengths and weaknesses from exam scores
- Program Evaluation by Fellows and Faculty
  - Annual review meeting of all rotations and meetings to improve curriculum
  - Fellows to evaluate Faculty and Program annually
  - Program Executive Committee Annual Meeting
  - Fellow Education Committee (Cogen, Gibson, 3<sup>rd</sup> Yr Fellows)

Sunrise at Alki Beach, West Seattle



# Faculty and Roles/*Research Interests*

- Terri Laguna, MD
  - Division Head
  - *CF airway microbiota; national leadership on DEI initiatives*
- Matthew Abts, MD
  - Pulmonary Lead for Aero-digestive Program/Director of Flexible Bronchoscopy
  - *Bone Marrow Transplant and Pulmonary Outcomes*
- Maida Chen, MD
  - Director of Sleep Medicine
  - *Sleep related research in craniofacial and other disorders*
- Jonathan Cogen, MD, MPH
  - Fellowship Program Director/Owner of Complicated Pneumonia-Empyema Pathway
  - *CF epidemiology, antibiotic stewardship, and climate change related research*
- Mary Crocker, MD, MS
  - General pulmonary medicine and asthma
  - *Asthma care in limited resource settings*
- Chelsea Davis, MD
  - General pulmonary medicine, CF, ventilator-dependent children
- Jason Debley, MD, MPH
  - General pulmonary medicine, ventilator-dependent children, severe asthma
  - *Translational research in airway biology and asthma*
- Amy Detorri, MD
  - General pulmonary medicine and cystic fibrosis
- Laura Ellington, MD, MS
  - Inpatient pulmonary medicine
  - *Lung health in limited resource settings*

Dungeness Spit, Port Angeles



# Faculty and Roles/*Research Interests* (2)

- Laurie Eldredge, MD, PhD
  - Pulmonary Lead for inpatient BPD Clinical Program
  - *Role of macrophages and epithelial cells in neonatal lung injury*
- Ron Gibson, MD, PhD
  - CF Center and Associate Fellowship Director, SCH CF Therapeutic Development Center
  - *Genetic modifiers of CF airway infection and lung disease; CF clinical trials*
- Luke Hoffman, MD, PhD
  - Director of CF Microbiology Laboratory
  - *CF airway and intestinal microbiology*
- Sarah Hofman DeYoung, MD
  - General pulmonary medicine, aerodigestive program, ventilator-dependent children
  - *Trach/vent related research*
- BreAnna Kinghorn, MD, MS
  - Member, Primary Ciliary Dyskinesia Referral Center
  - *PCD and Non-CF Bronchiectasis/Congenital Diaphragmatic Hernia*
- Carey Lockhart, MD
  - Pediatric Neurology and Sleep Medicine
- Erin MacKintosh, MD
  - Pulmonary and Sleep medicine
  - *Pulmonary and Sleep Disorder manifestations of Marfan's syndrome, Medical education*
- Susan Marshall, MD
  - Vice Chair for Medical Education
  - *CF Clinical trials and Medical Education*

Washington Coast





# Faculty and Roles/ *Research Interests* (3)

- Thida Ong, MD
  - Associate CF Center Director/Medical Director of QI in Pulmonary Division
  - *QI research in pulmonary and nutritional outcomes in CF*
- Robin Ortenberg, MD
  - General pulmonary medicine and rheumatic lung disease
  - *Medical education and pulmonary complication of sickle cell anemia*
- Weston Powell, MD, PhD
  - General pulmonary and sleep medicine
  - Airway epithelial circadian rhythms in pediatric asthma and viral infections
- Gregory J. Redding, MD
  - Former Division Chief
  - PI of the Pediatric Pulmonary Center Grant x 20+ years, Alaska Outreach Program
  - *Scoliosis and Thoracic Insufficiency Syndromes, Non-CF Bronchiectasis in Alaskan Natives*
- Steve Reeves, MD, PhD
  - Tech Guru/Lead-Wenatchee Outreach Clinic
  - *Translational research in airway matrix biology and asthma*
- Margaret Rosenfeld, MD, MPH
  - Assoc. Vice Chair for Research, Co-Director, Center for Clinical and Translational Research
  - *CF Epidemiology, treatment and outcome measures in early CF lung disease, PCD, and global health*
- Michelle Sobremonde-King, MD
  - Pulmonary and Sleep medicine
  - *Neuromuscular disease and care of chronically-ventilated patients*

Diablo Lake



# Faculty Roles / *Research Interests* (4)

- Amanda Striegl, MD, MS
  - Medical Director of Respiratory Therapy/Pulmonary Lead Neuromuscular Disease
  - *Quality improvement in technology dependent children and neuromuscular respiratory disease*
- Demet Toprak, MD
  - Director of the PFT Laboratory
  - Interstitial lung disease, rheumatic lung disease and vocal cord dysfunction
  - *CF-related clinical research*
- Joanna Wrede, MD
  - Pediatric Neurology and Sleep Medicine
- Ben Wilfond, MD
  - Chief, Division of Bioethics
  - *Ethics/Shared Decision Making in Technology Dependent Children*
  - *Ethics related to Informed Consent/Genomic studies*
- Holly Vo, MD, MS
  - Combined bioethics/general pulmonary medicine
  - *Health disparities and shared-decision making regarding tracheostomy placement and home mechanical ventilation*

Crystal Mountain



# Free Time!

- New concept after residency experience!
  - Can be unsettling but consider this the “educational playground”
- Case-based reading to gain expertise in Peds Pulmonary
  - “Humility is only a case away”
- Read a Peds Pulmonary textbook by end of Fellowship
- Coursework
- Explore research ideas
- Refine research ideas
- Conduct Research
- Have Fun!

Space Needle, Downtown Seattle





# Living in Seattle

## Our favorite things about living in Seattle:

- Live within one hour of three national parks with access to hikes, beaches and water activities
- Home to six professional sports teams: Sounders (MLS), OL Reign (NWSL), Kraken (NHL), Mariners (MLB), Storm (WNBA), and Seahawks (NFL)
- More than 60 breweries in Seattle (generally specialize in IPAs; Burke Gilman Brewery across the street from the hospital!)
- Year-round farmer's market, including world-famous Pike Place and Ballard
- World-class music venues (e.g., Showbox Soto, Tacoma Dome)
- Family-friendly zoo, children's museums, Museum of Flight, Chihuly Museum of Glass, and MOPOP
- Lots of independent coffee shops (we have Starbucks too 😊) and chocolatiers (Theo Chocolate, Seattle Fudge)
- Take a ferry to Victoria, BC or a whale-watching tour to see resident orcas



# Additional Resources

- In lieu of coming to Seattle for a physical interview University of Washington GME has created the following videos to provide more information related to fellowship and Seattle Children's Hospital
- Resident's look inside Seattle Children's Hospital  
<https://youtu.be/sbh17XpT5PA>
- Look into research at Seattle Children's Hospital  
<https://youtu.be/v6WK8-F34WA>
- Message to fellows from Dr. Walker-Harding (Chair of Pediatrics, University of Washington)  
<https://youtu.be/XS3NaoAkNfM>



# 2022 Graduation Celebration





# Fellowship Graduation Photo 2022



# Fellowship Graduation Photos 2022



Current Third Year Fellows Ashley and Courtney

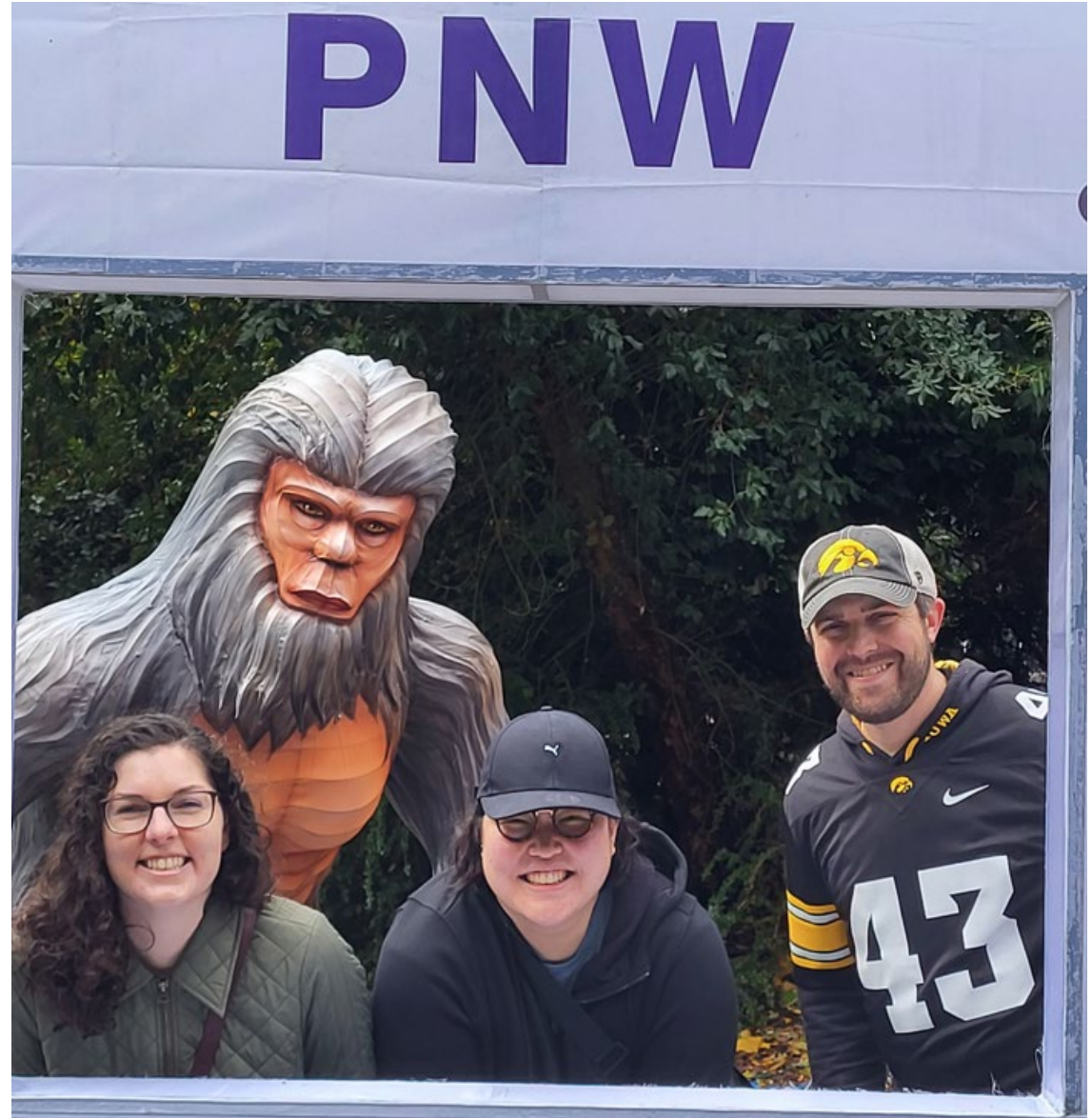


# First Year Fellow Welcome





# Fellow Trip to Woodland Park Zoo





# 2022 ATS Meeting



## Celebration for Greg at 2019 ATS Meeting



## CF Team at 2019 NACFC Meeting





# Eating at ATS





# Halloween in the Pulmonary Division!





# Halloween in the Pulmonary Division!





# Hiking in the Pacific Northwest!

