The career development year

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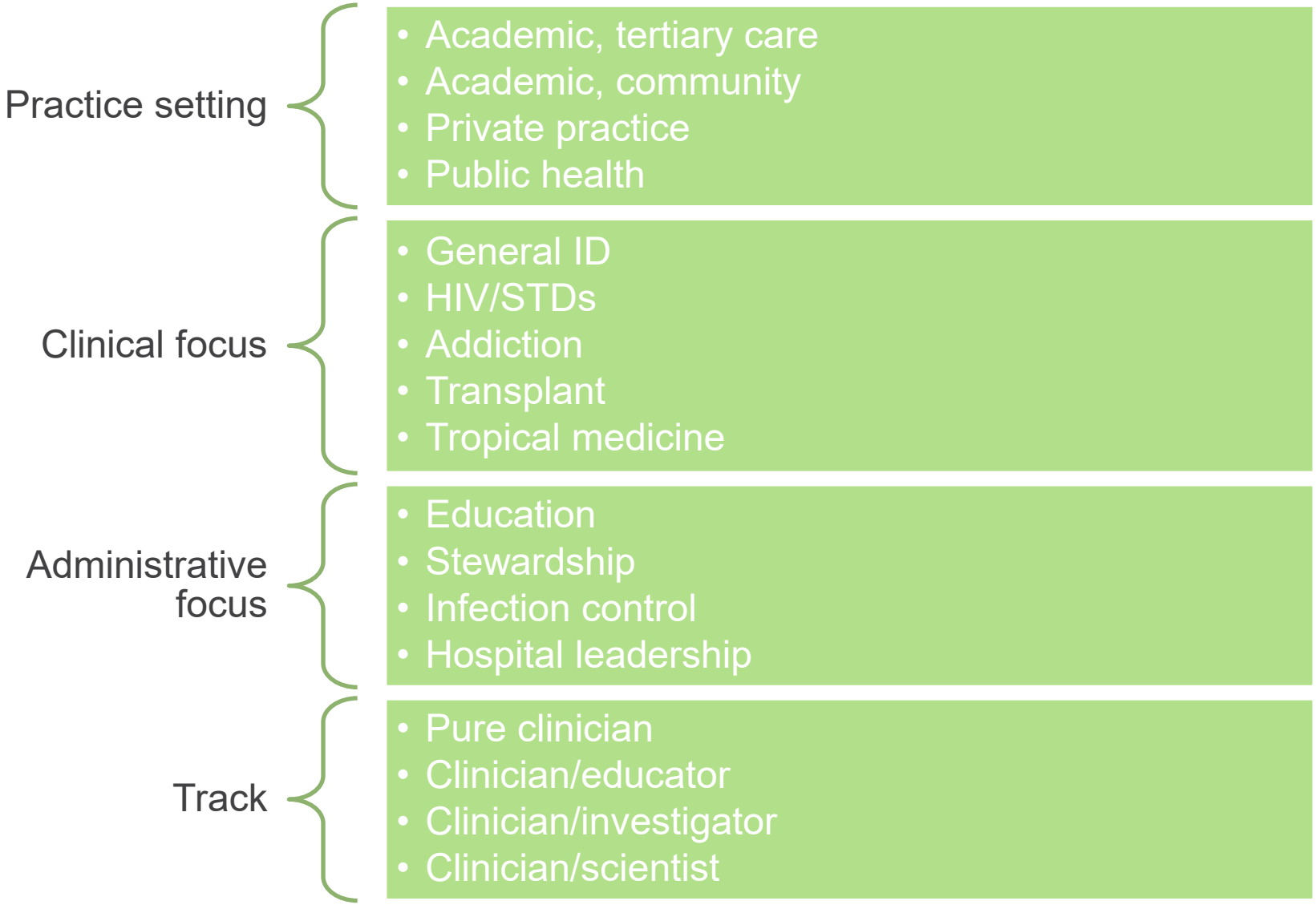
Disclosures

- None

Objectives

- Identify career pathways within the subspecialty of infectious diseases
- Identify the critical role of mentorship in career development
- Understand the pathways to gaining skills helpful for future career development
- Identify how to obtain a job which allows one to achieve one's career goals

Career pathways within ID

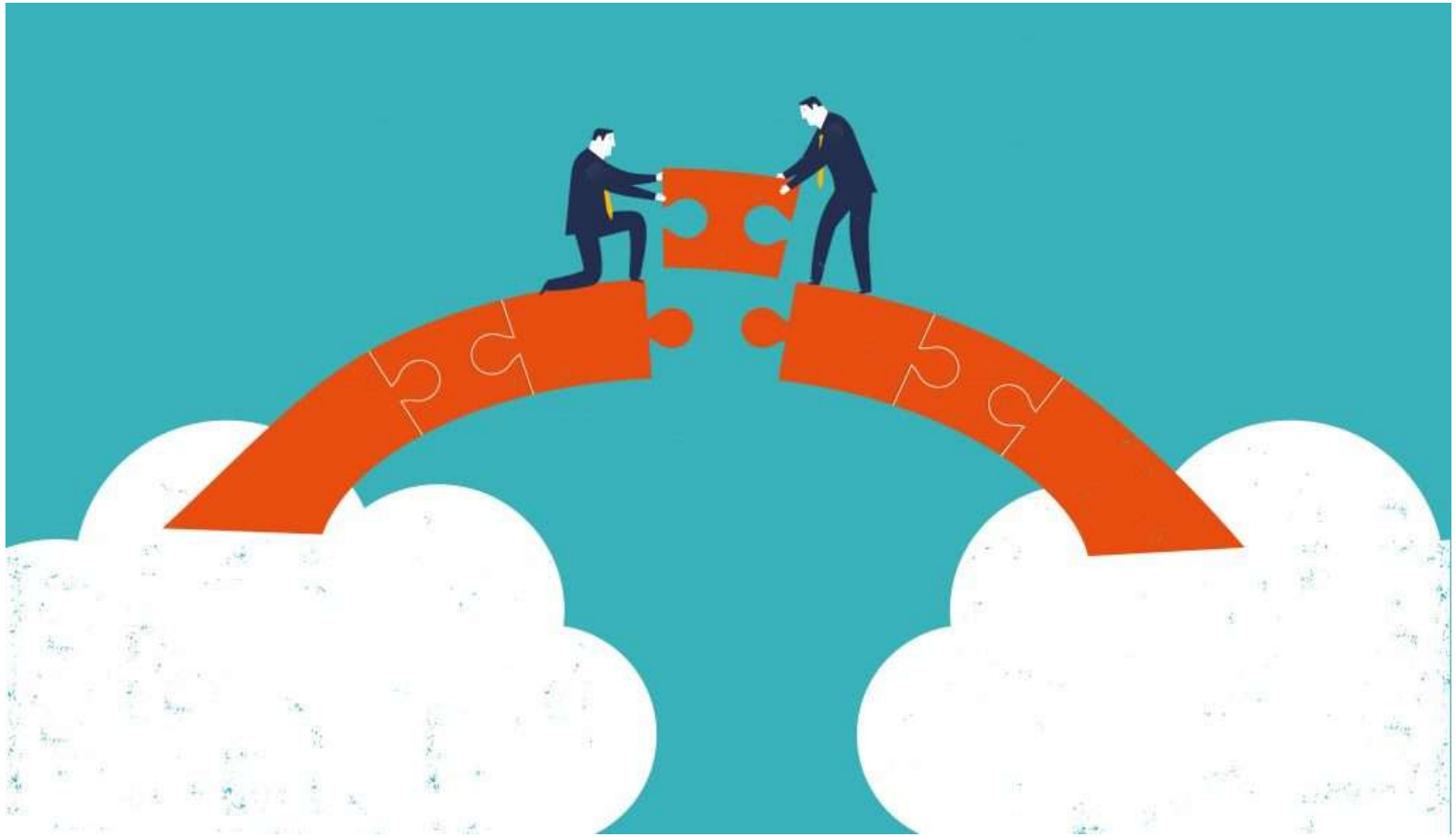


Career pathways within ID

- Why is deciding all this now so important?

Career pathways within ID

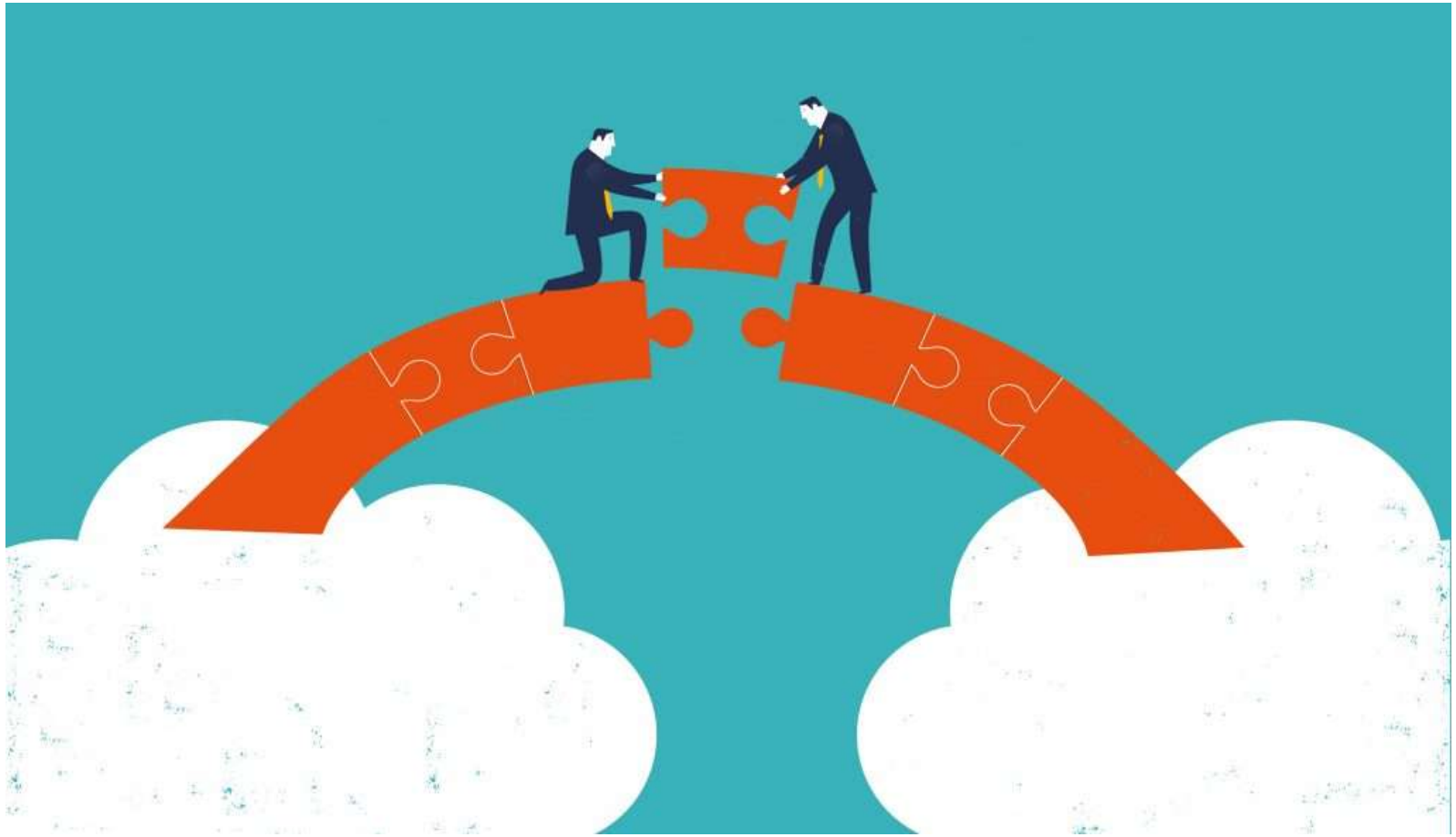
- Skills gap



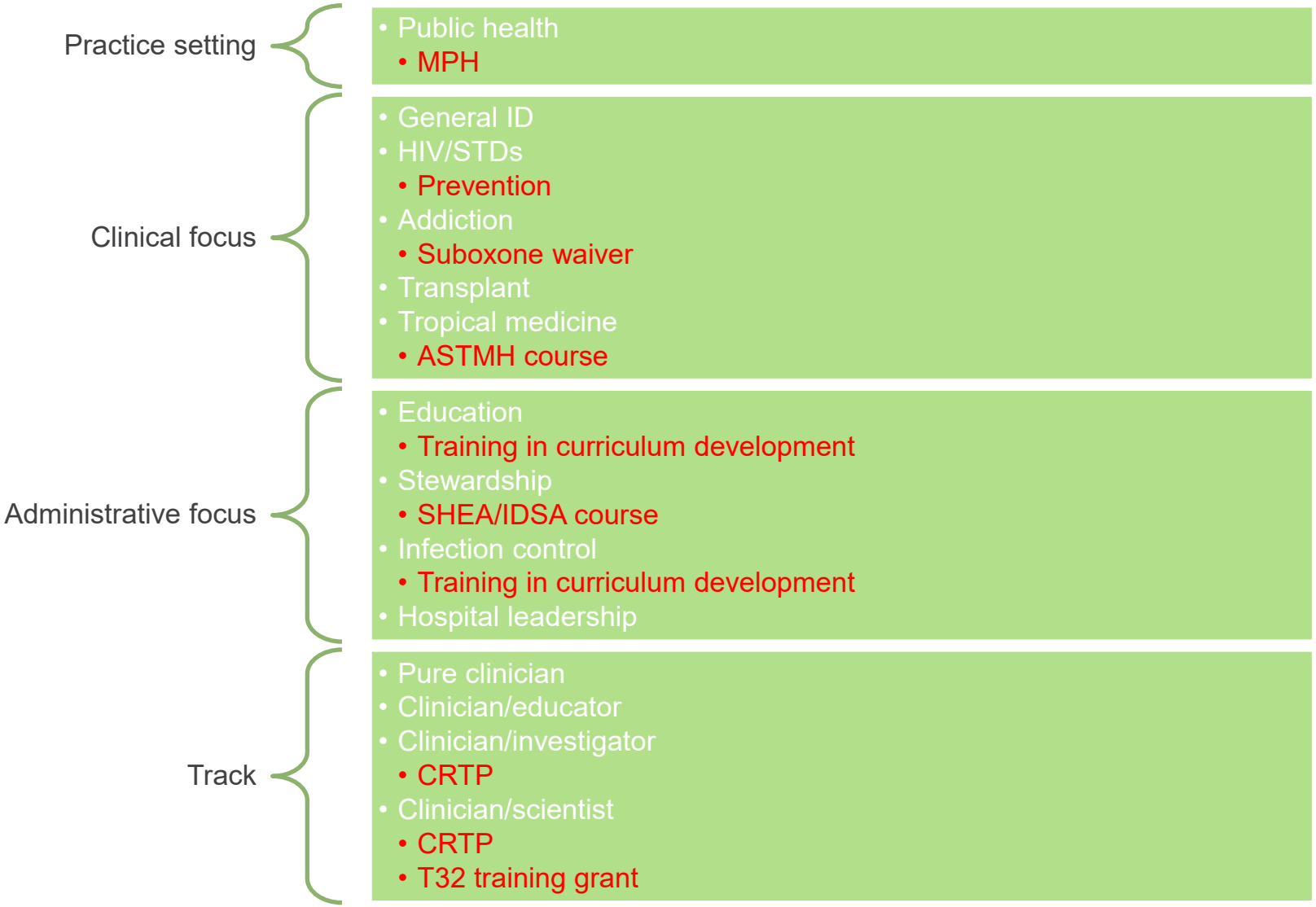
Career pathways within ID

Career pathways within ID

- So how does one go about bridging the skills gap?



Career pathways within ID: formal didactics



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Choosing a mentor

a dynamic, reciprocal relationship in a work environment between an advanced-career incumbent (mentor) and a beginner (mentee) aimed at promoting the career development of both

Mentoring in Academic Medicine. Philadelphia, PA: ACP Press; 2010.

Mentoring agreement

Trainee Name: _____ **Mentor Name:** _____	**Initial Meeting**	**2nd meeting:** one month after initial meeting	**Final meeting:** At the end of the program
Length of mentoring relationship			
Mentee; What type of help do you needfrom mentor? Be specific.			
Mentee; What expectations do you have of mentor? Be specific.			
Mentor; What expectations do you have of mentee?			
Important factors; What are key factors to a good mentor/mentee relationship?			
Meeting set up; Who will initiate the meeting?			
Frequency of the meetings? Where and when?			
Means of Communication; Provide phone# and email. *By providing this info you give permission to be contacted.*			
Ground Rules; State the basics you like to have during the discussions? (e.g., honesty, confidentiality, frankness etc.)			
Resolution; If problems arise how will they be resolved?			
Mentee; Problems/ Concerns; What do you want todiscuss and resolve?			
Mentor; Problems/Concerns; What do you want todiscuss and resolve?			
The initial meetings will focus on these two topics:	1. 2.		
Additional areas/issues that the mentor/mentee wants to discuss and agree to?			
Comments			
Mentee Signature	**Date**		
Mentor Signature	**Date**		

Mentee Name:_____

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Infectious Diseases Training Program
Mentoring Agreement Form
(To be completed by mentee and mentor jointly)

BMC Med Educ. 2014 Sep 24;14:202.

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How can the year go wrong?

- Project/mentee mismatch
- Mentor/mentee mismatch

JAMA. 2016 Apr 12;315(14):1453-4

Table. Diagnosing and Treating Mentorship Malpractice

	Phenotype	Underlying Pathology	Diagnostic Symptoms and Signs	Complicit Mentee Acts	Potential Countermeasures
Active Mentorship Malpractice	The Hijacker	Self-preserving behavior related to string of failures.	Academic and intellectual insecurity, financial challenges, limited creativity, fear of being overtaken by others.	Sacrifice first-author positions; name mentor as principal investigator on projects.	Quick and complete exit. There is no way to protect yourself in this relationship.
	The Exploiter	Self-serving philosophy with tendency to self-worship; promotes personal interests over mentees.	Assignment of tasks such as supervising staff, managing projects unrelated to mentee. Believes mentee should be privileged to work with them.	Willing to accept nonacademic chores that support mentor rather than self.	Trial of firm boundary setting and use of additional mentors to evaluate requests. If or when mistrust ensues, exit the relationship.
	The Possessor	Anxious personality with powerful feelings of inadequacy, fears loss of mentee to others.	Specific instructions to not engage with other mentors or collaborators; constant supervision of mentee activities.	Foster isolation by following mentor demands; misinterpret undivided attention.	Insist on a mentorship committee; confront mentor with concerns regarding siloed approach.
Passive Mentorship Malpractice	The Bottleneck	Internal preoccupation coupled with limited bandwidth or interest to support mentee growth.	Often busy with own tasks or projects; limited time to meet face-to-face; inadequate response to requests for help; delays in feedback.	Allow the mentor to set timelines; facilitate behavior by silence or lack of insistence on clarity/detail.	Set firm deadlines and be clear about what happens on those deadlines; follow through with action and articulate frustration with mentor inability to prioritize.
	The Country Clubber	Conflict-avoidant personality, needs to be liked by colleagues; values social order more than mentee growth.	Avoids advocating for mentee resources such as staff, protected time; discourages mentee from similar debates.	Fail to ask mentor to advocate for mentee.	Develop a mentorship team so other mentors may engage in conflict on your behalf. Approach conflict/debate with focus on impact if not addressed.
	The World Traveler	Academic success fueling personal ambitions, travel requirements, desire for fame/appreciation.	Internationally renowned, highly sought-after for speaking engagements. Limited face-to-face time due to physical unavailability.	Accept lack of mentor availability; fail to connect with mentor via alternative methods of communication.	Establish a regular cadence of communication. Reserve time well in advance for in-person meetings. Use alternative methods for communication.

JAMA. 2016 Apr 12;315(14):1453-4

Presenting your work

- Whether you do a basic science project, a clinical science project, quality improvement, or medical education, you need to be able to present what you did in abstract and oral form
- Accordingly, presenting your data (and developing the skills to do so) is a key skill to develop, *no matter what your long term career goals*

Baseline characteristics

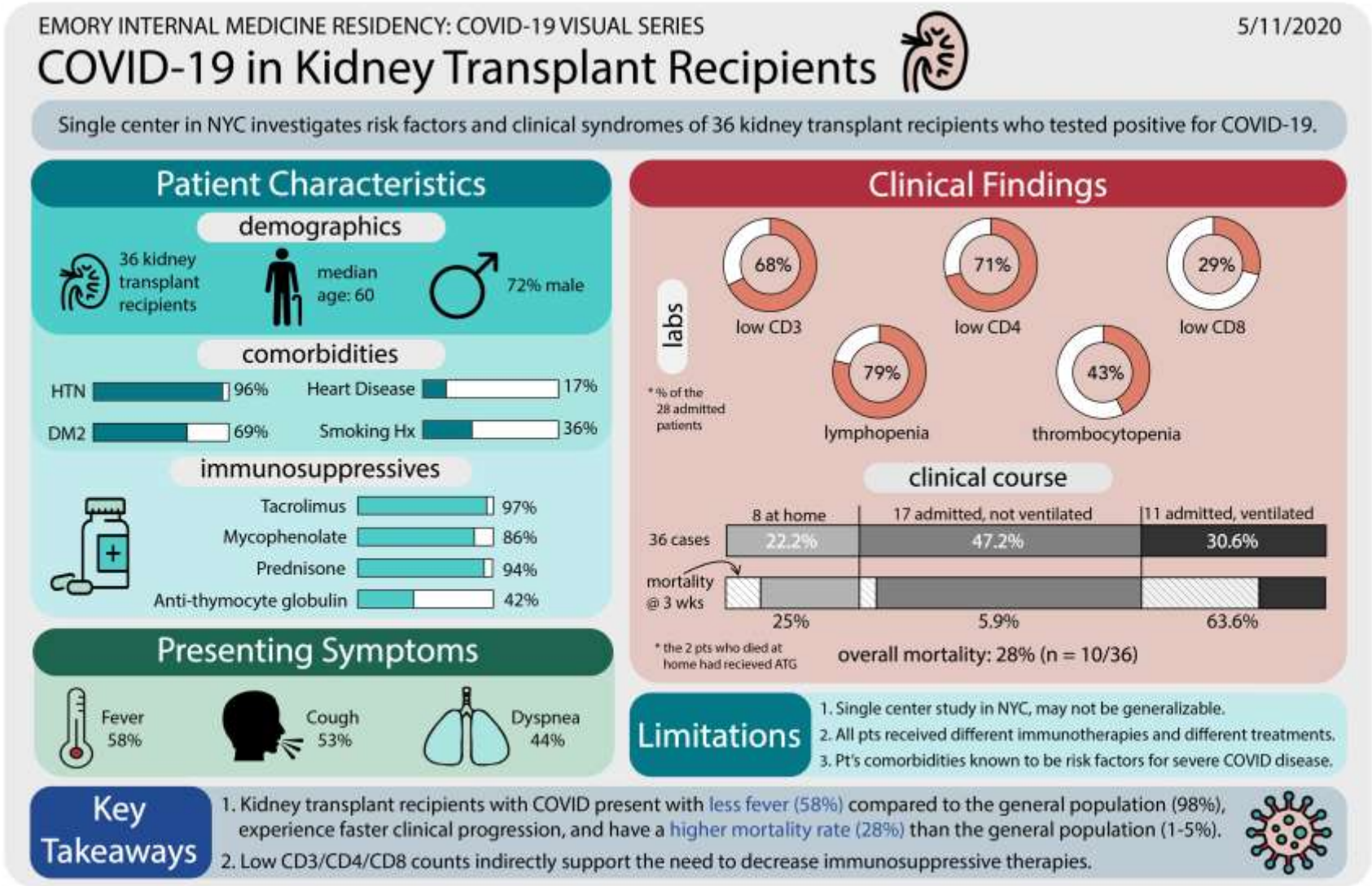
Table 1: Clinical characteristics of the patients at baseline

	Patient Number (%) n= 36
Sex, male, n %	26 (72)
Age in years, median [range]	60 [32-77]
Race, African-American, %	14 (39)
Ethnicity, Hispanic %	15 (42)
Type of renal transplant, deceased donor, %	27 (75)
Anti-thymocyte globulin induction, %	15 (42)
Maintenance immunosuppression, %	
Tacrolimus	34 (97)
Mycophenolate 2g/day	11 (31)
Mycophenolate 1 g/day	16 (44)
Mycophenolate < 1 g/day / No mycophenolate	9 (25)
Prednisone	34 (94)
Causes of renal disease, %	
Diabetic nephropathy	19 (53)
Glomerulonephritis	8 (22)
Hypertensive nephroangiosclerosis	5 (14)
Others	3 (8)
Comorbidities, %	
Hypertension	34 (94)
Diabetes mellitus	25 (69)
Heart disease	6 (17)
Lung disease	4 (11)
Cancer	2 (6)
Smoking history, %	13 (36)
Influenza vaccination, %	21 (58)
Body mass index (median [range]) kg/m2	29.3 [21.2-43.6]
Use of Angiotensin-II Receptor Blocker, %	8 (22)
Presenting symptoms, %	
Fever	21 (58)
Cough	19 (53)
Dyspnea	16 (44)
Myalgias	13 (36)
Diarrhea	8 (22)
Baseline Creatinine (median [range]) mg/dL	1.4 [0.8-6.3]

- Most patients were Hispanic or African-American
- Over half had pre-transplant diabetes; 69% were diabetic at the time of illness
- Median BMI 29
- At time of presentation, only 58% were febrile, and only 53% had cough.

N Engl J Med. 2020 Apr 24:NEJMc2011117.

Presenting the same data in infographic form



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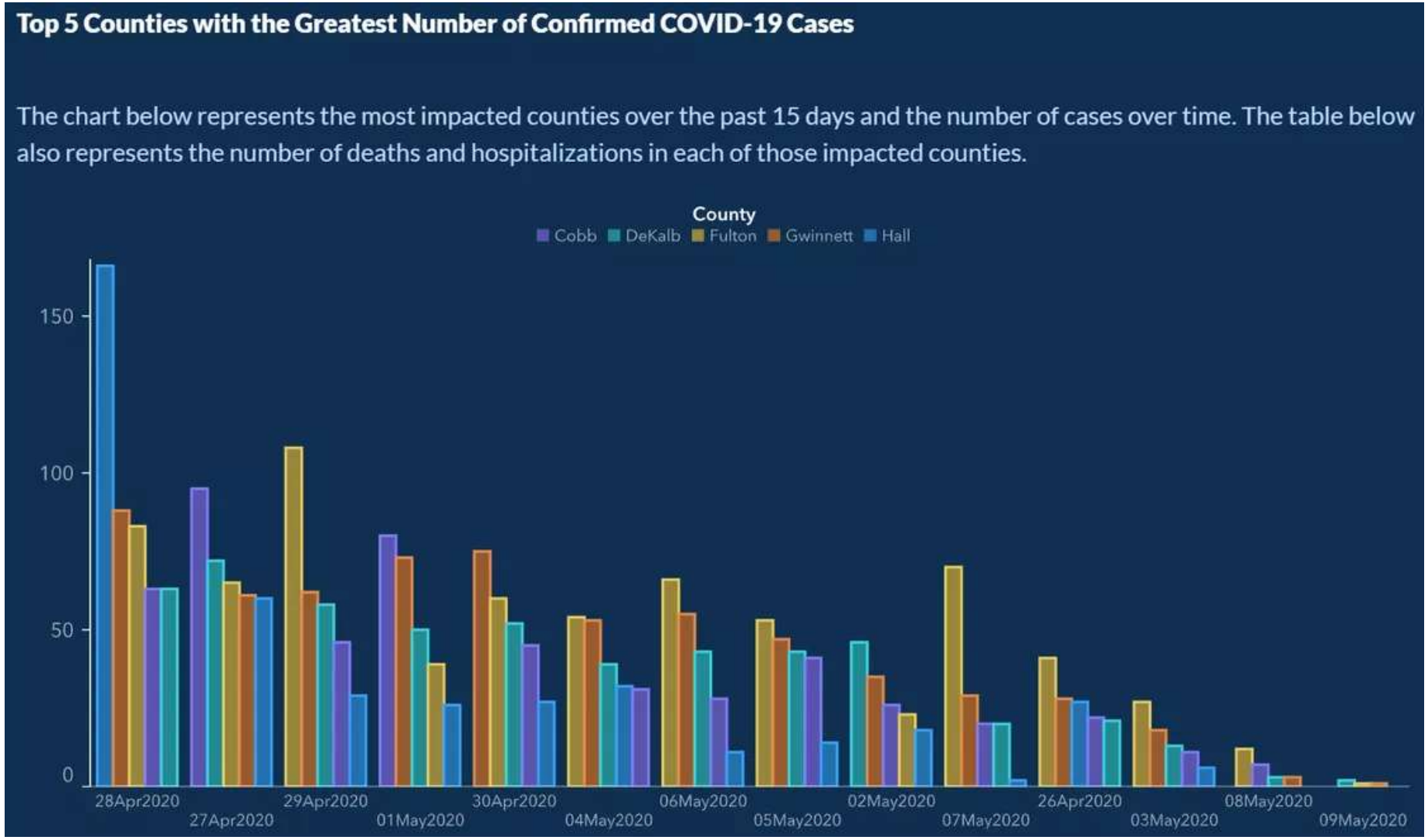
Why is understanding how to present data important?



https://www.ajc.com/news/state--regional-govt--politics/just-cuckoo-state-latest-data-mishap-causes-critics-cry-foul/182PpUvUX9XEF8vO11NVGO/

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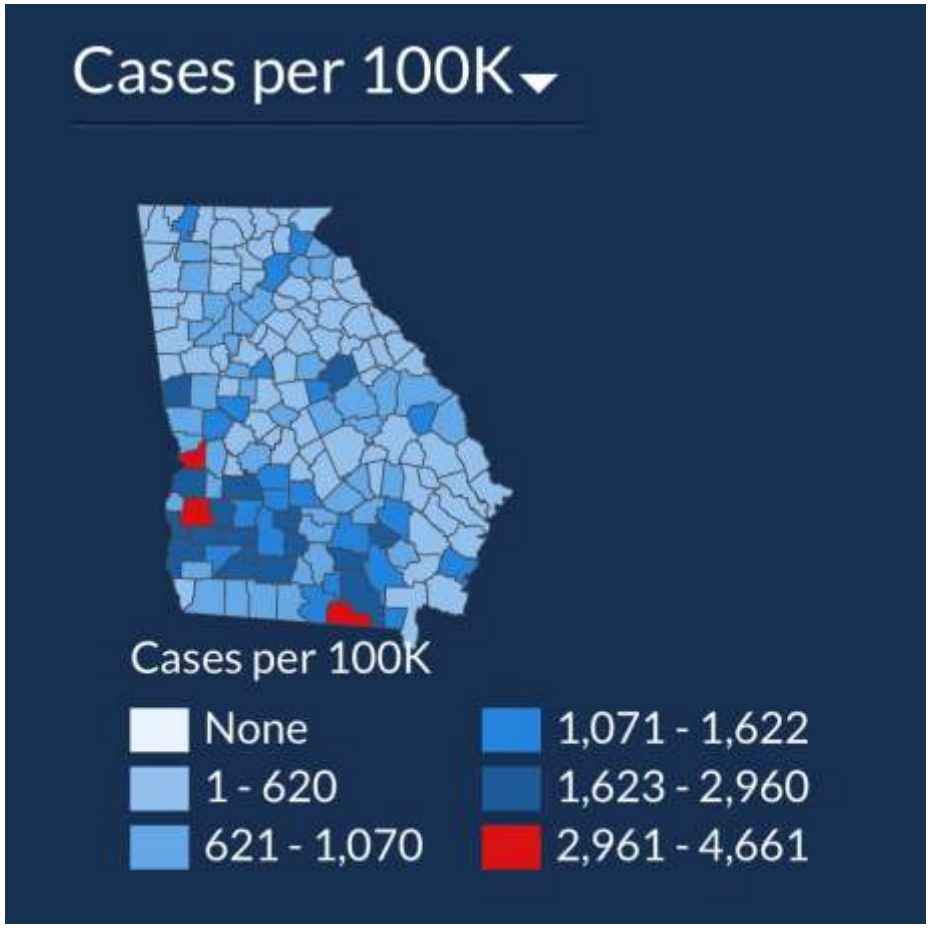
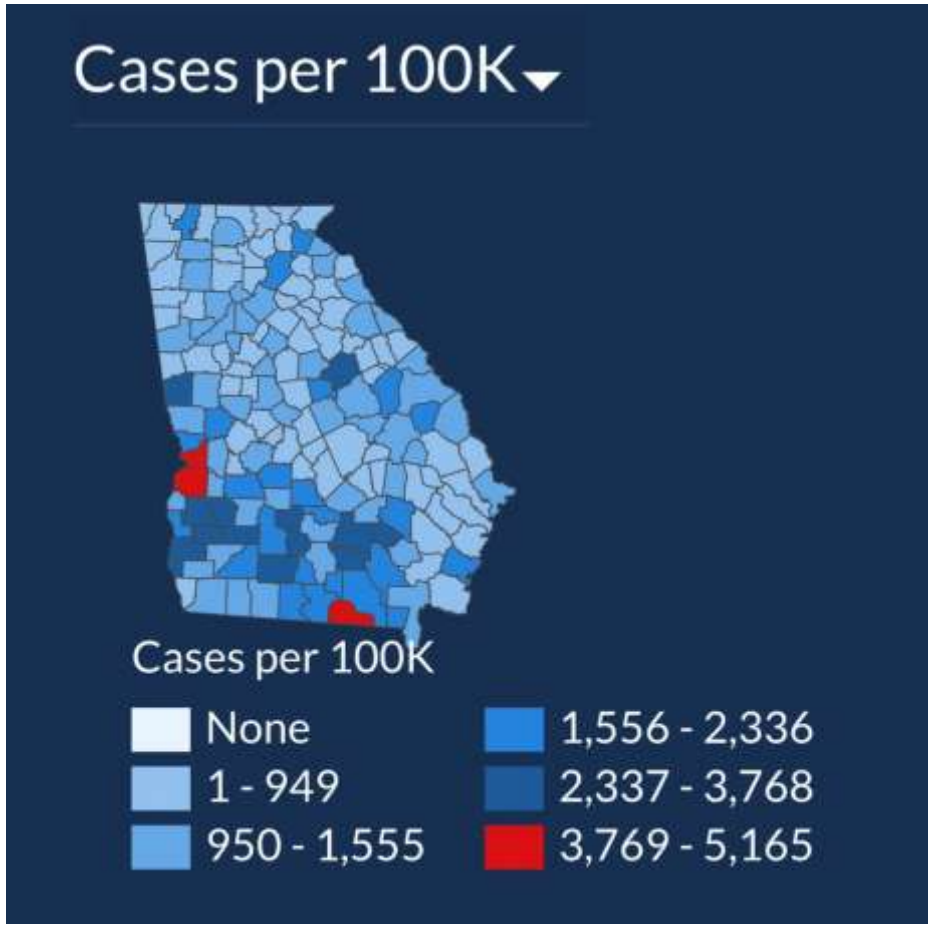
More data presentation malpractice



July 2, 2020



July 17, 2020

https://twitter.com/andishehnouraee/status/1284237474831761408

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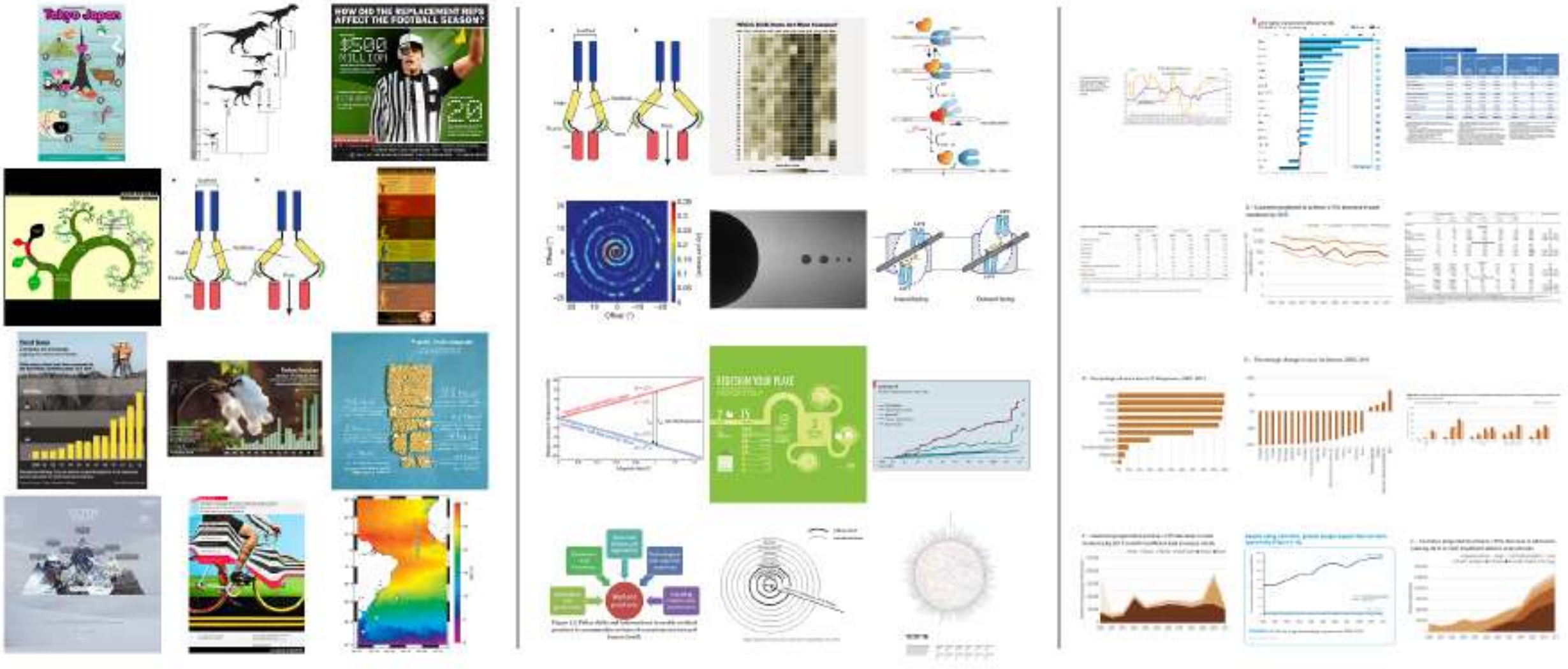

IEEE Trans Vis Comput Graph. 2013.

I’m going into private practice; why should I care?

I’m going into private practice; why should I care?

- First of all, you will be a *consumer* of research your entire career, and experience with conducting research will make you a better consumer of the research you read

I’m going into private practice; why should I care?

Brief Report

INDEX CASE OF FATAL INHALATIONAL ANTHRAX DUE TO BIOTERRORISM IN THE UNITED STATES

LARRY M. BUSH, M.D., BARRY H. ABRAMS, M.D., ANNE BEALL, B.S., M.T., AND CAROLINE C. JOHNSON, M.D.

SINCE the mid-1990s, *Bacillus anthracis*, the causative agent of anthrax, has been postulated to be a likely agent of biological warfare or terrorism because of its physical properties and its virulence factors. Several countries have been known to have biologic-weapons programs that were focusing on *B. anthracis* for potential military use. However, fatal anthrax had not been encountered in the United States as a weapon in an act of war or terror until the index case we report was recognized[1].

Anthrax is a rare bacterial infection acquired by inhalation, ingestion, or cutaneous contact with the endospores of *B. anthracis*.[2] The organism is normally a pathogen of large herbivorous mammals, and infection in humans normally results from contact with infected animals or contaminated animal products, especially hides. Inhalational anthrax is particularly rare and, in previous eras, has usually been fatal once the disease is established. Of the few cases reported in the United States, almost all have been associated with occupational exposure to endospores. We present the

of a coronary stent for atherosclerotic heart disease. Otherwise, he had been in good health. His only regular medications were daily metoprolol and aspirin.

The patient was a nonsmoker and an avid outdoorsman whose pastimes were gardening and fishing. Four days before he was admitted to the hospital, the patient had been in good health and had left for a brief recreational trip to North Carolina. Immediately on his arrival in North Carolina, the first symptoms of illness developed; these included muscle aches, nausea, and fever. The symptoms waxed and waned for the duration of the three-day trip. The day after he returned home, he was taken to the hospital for medical evaluation. During the trip, he had spent time outdoors, but he could identify no unusual exposure, including exposure to animals or animal hides. The patient was employed as a photo editor for a major tabloid newspaper and had been working until the day he departed for North Carolina. His duties usually kept him in a large office building in Florida, where he spent most of the day reviewing photographs submitted by mail or over the Internet.

On physical examination, he was found to be lethargic and disoriented. His temperature was 39°C (102.5°F), the blood pressure was 150/80 mm Hg, the pulse was 110, and the respirations were 18. No respiratory distress was noted; his arterial hemoglobin saturation, as indicated by pulse oximetry while he was breathing ambient air, was 97 percent. No evidence of trauma was noted on examination of the head. Funduscopic examination was normal, as were the conjunctiva. Examination of the ear, nose, and throat detected no discharge or signs of inflammation. There was no discernable nuchal rigidity; Kernig’s and Brudzinski’s signs were absent. The trachea was at midline, and there was no edema of the cervical or thoracic region. Chest examination revealed bibasilar rhonchi without rales. No murmurs, rubs, or gallops were heard on cardiac auscultation. The abdomen was soft, without rebound tenderness or organomegaly. Examination of the joints, legs, and arms was essentially normal. No lesions or rashes were noted on the skin. No focal deficits were noted on neurologic examination; there were no cranial-nerve palsies.

The results of the patient’s laboratory tests on hospital admission are shown in Table 1. The initial chest radiograph (Fig. 1) was interpreted as showing basilar infiltrates and a widened mediastinum. The results of computed tomography of the head, performed without intravenous contrast medium, were normal. A spinal tap was performed under fluoroscopic guidance within hours after

L M Bush, B H Abrams, A Beall, C C Johnson. N Engl J Med. 2001 Nov 29;345(22):1607-10.

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I’m going into private practice; why should I care?

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Goals for the year

- Identify what you want to be
- Identify a mentor
- Decide what you want to accomplish and the skills you want to gain
- Do something!
- Generate data based on what you did
- Dissemination
  - Medicine research day
  - Visual abstract on Montefiore/Einstein Twitter account
  - Local, national conference presentation
  - Academic publication

The job hunt

- Some frank advice
  - Not every academic job will necessarily let you apply for a K/take on educational responsibilities/etc
- Attending jobs are not like the match—you get what you can negotiate
- ID is a small world; program leadership can help try to help you identify pitfalls
- More to come on job searching in the Spring!

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