

A program director's perspective on recruitment and selection

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Disclosure statement

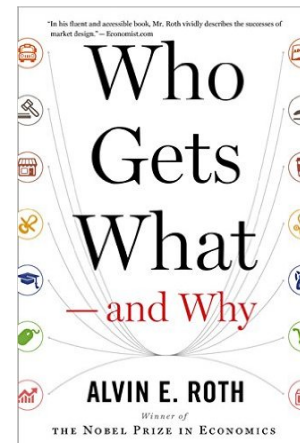
- Immediate past president of APPCN
- APPCN member program director

Matching Markets

Al Roth: “Matching markets are markets where you can’t just choose what you want, you also have to be chosen”

Who Gets What: The New Economics of Matchmaking and Market Design
[Stanford Graduate School of Business](https://www.stanford.edu/schools/business/) :

<https://www.youtube.com/watch?v=kj2fpM57Z7A>



Matching Markets

- Jobs
 - Marriage
 - Medical residency
 - Psychology internships
 - Public School choice
 - Kidney exchange
 - Neuropsychology Postdoctoral Programs?
- } Decentralized
- } Centralized
- } ???



Market Selection

- Decentralized
 - Open Market
 - No rules regarding offers and acceptances
- Centralized
 - Rules for making and accepting offers
 - Varying degrees of “closed system”



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Market Selection

Decentralized

Freedom

Negotiation

Creeping offers

Exploding offers

Bottlenecks

“Unraveling”

Centralized

Rules

Agreed timeline

Better behavior

Perceived less stress

Consider all alternatives

Restrictive

Sense of uncertainty

Need full participation

Centralized approaches

- Uniform notification dates (UND)
 - Stressful
 - Subject rule breaking
- Shared Calendar
 - Creeping offers and bottlenecks
 - Attempts to “game” the system
- Computer match
 - An imperfect solution?



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How does the match work?

- **Deferred acceptance algorithm** Alvin E. Roth (<http://www.nber.org/papers/w13225>)
An outcome of the game is a matching: $\mu: M \cup W \rightarrow M \cup W$ such that $w = \mu(m)$ if and only if $\mu(w) = m$, and for all m and w either $\mu(w)$ is in M or $\mu(w) = w$, and either $\mu(m)$ is in W or $\mu(m) = m$. That is, an outcome matches agents on one side to agents on the other side, or to themselves, and if w is matched to m , then m is matched to w . A matching μ is blocked by an individual k if k prefers being single to being matched with $\mu(k)$, i.e. $k \succ_k \mu(k)$. A matching μ is blocked by a pair of agents (m, w) if they each prefer each other to the partner they receive at μ , i.e. $w \succ_m \mu(m)$ and $m \succ_w \mu(w)$. A matching μ is stable if it isn't blocked by any individual or pair of agents.
- For the psychologists in the room:
<https://www.natmatch.com/appcnmat/aboutalg.html>



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Why the Computer Match?

- Applicants and programs can **consider all of their options**
- Rules **prohibit pressure** on applicants **or** programs to make a premature decision
- Match is based on the **true and actual preferences** of applicants and programs
- Produces **stable matches**: no applicant and program not matched with each other prefer each other to their assigned matches



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Conclusion

- What's best for the shared community and our specialty?
 - Better matches = better training = better future



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