Essentials of Start-Up Law
An Introduction

University of California, San Diego
Entrepreneurship Seminar Series 2017-2018
Presenter: Ruben Flores

WELCOME
Presenter: Dr. Jeff Guise

INTRODUCTION
Jeffrey W. Guise  
*Partner, Intellectual Property*

San Diego | Phone | 858-350-2307 | Fax | 858-350-2399 | jguise@wsgr.com

Dr. Jeffrey Guise is a partner in the San Diego office of Wilson Sonsini Goodrich & Rosati. He practices in the area of intellectual property law and has extensive experience in all aspects of intellectual property acquisition, licensing, and enforcement. Jeff's intellectual property litigation experience includes pre-trial and trial experience, interference proceedings, and litigation counseling. His intellectual property counseling experience includes drafting non-infringement and validity opinions, freedom-to-operate analyses, and invention records management plans. Jeff's patent prosecution experience includes drafting and prosecuting U.S. and international patent applications for a wide range of biotechnology, pharmaceutical, immunology, medical diagnostics, genetic engineering, agricultural biotechnology, genomics, proteomics clients, bioinformatics software, and electronic hardware systems. He also has extensive experience in negotiating and drafting license agreements.

Prior to joining Wilson Sonsini Goodrich & Rosati, Jeff was a partner at Pillsbury Winthrop. Prior to Pillsbury Winthrop, he was a partner at both Brobeck, Phleger & Harrison and Lyon & Lyon.

**EDUCATION:**
- J.D., University of San Diego School of Law, 1992
  *Cum Laude*
- Ph.D., Molecular Biology and Immunology, University of Texas, Southwest Medical Center, 1987
- B.S., University of Iowa, 1981

**ASSOCIATIONS AND MEMBERSHIPS:**
- Member, American Association for the Advancement of Science
- Member, American Bar Association
- Member, American Intellectual Property Law Association
- Member, American Society for Microbiology
- Member, Federal Circuit Bar Association

**ADMISSIONS:**
- State Bar of California
- U.S. District Court for the Central District of California
- U.S. District Court for the Eastern District of California
- U.S. District Court for the Northern District of California
- U.S. Patent and Trademark Office
- U.S. District Court for the Southern District of California
- U.S. Court of Appeals for the Federal Circuit
- U.S. Court of Appeals for the Ninth Circuit
- U.S. Court of Appeals for the Federal Circuit
Schedule

2:00 p.m. Welcome (Ruben Flores)
2:15 p.m. Introduction (Jeff Guise)
2:30 p.m. Forming & Organizing the Start-up & Founders Stock (Rob Kornegay)
3:15 p.m. Intellectual Property – Patents (Matt Bresnahan)
3:45 pm Intellectual Property – Licensing (Miranda Biven)
4:15 p.m. Break
4:30 p.m. Business Plans & Fundraising Trends (Rob Kornegay)
5:30 p.m. Introduction to Term Sheets (Zach Myers)
6:00 p.m. Networking Reception
Business Model

Providing experienced representation tailored to clients’ unique needs at every stage of growth
Who We Are & What We Do

- Our track record:
  - Represent more companies that receive venture financing than any other law firm
  - Advise more U.S. companies on their initial public offerings than any other law firm
  - Represent more technology companies in mergers and acquisitions than any other U.S. law firm
  - Advise more than 300 public and 3,000 private enterprises on issues of corporate law, securities, and corporate governance
Entrepreneur & Private Company Practice

- Founded in 1961 with over 650 attorneys located across the globe
- Actively represent more than 3,000 private companies
- Deep relationships in the venture capital community
- Incorporate thousands of successful businesses (e.g., Autodesk, Coherent, Cypress Semiconductor, Google, Linear Technology, and Sun Microsystems)
- Provide value-added resources:
  - Entrepreneurs College
  - Entrepreneur’s Report
  - Online Term Sheet Generator

WSGR represents more companies than any other U.S. law firm*

<table>
<thead>
<tr>
<th>Law Firm</th>
<th>Companies Represented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gunderson Dettmer</td>
<td>171</td>
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<tr>
<td>Cooley</td>
<td>161</td>
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<tr>
<td>Goodwin Procter</td>
<td>80</td>
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<td>WilmerHale</td>
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<td>DLA Piper</td>
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<td>Fenwick &amp; West</td>
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<td>Orrick, Herrington</td>
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<tr>
<td>Morgan Lewis</td>
<td>22</td>
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<tr>
<td>Morrison &amp; Foerster</td>
<td>21</td>
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*Source: Dow Jones VentureSource based on venture equity financings in 2014.
Wilson Sonsini Goodrich & Rosati

Since 1961
14 Offices Worldwide
More than 700 Attorneys
3,000+ Private Clients
300+ Public Clients

= Wilson Sonsini Goodrich & Rosati offices
<table>
<thead>
<tr>
<th>Industry</th>
<th>Clients Description</th>
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</thead>
<tbody>
<tr>
<td>Information Technology</td>
<td>Represent thousands of information technology clients</td>
</tr>
<tr>
<td>Life Sciences</td>
<td>Represent more than 500 biopharmaceutical and medical device clients</td>
</tr>
<tr>
<td>Energy &amp; Clean Technology</td>
<td>Represent more than 300 energy and clean technology clients</td>
</tr>
</tbody>
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On the Forefront of Groundbreaking Industries

![Logos of various companies representing the industries mentioned.]
Connecting Startups With Investors

Represent and collaborate with more than 100 venture capital and private equity funds, including:
Why Are We Here?

- Southern California is the 3rd Largest Venture Capital Ecosystem in the U.S.
- Many factors have led to growth spike in investment interest & investor communities
  - Talent pool from surrounding universities
  - Technology infrastructure services make building companies cheaper
  - Strong exit activity
# Sessions Schedule – All are from Noon – 2 pm

## 2017

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>April 12</td>
<td>Forming &amp; Organizing the Start-up &amp; Founders Stock</td>
<td>Dan Koeppen</td>
</tr>
<tr>
<td>May 11</td>
<td>Intellectual Property – Patent Strategy</td>
<td>Matt Bresnahan</td>
</tr>
<tr>
<td>June 8</td>
<td>Hiring and Compensating Employees &amp; Conflicts of Interest</td>
<td>Rob Kornegay</td>
</tr>
<tr>
<td>October 12</td>
<td>Intellectual Property – Licensing</td>
<td>Miranda Biven</td>
</tr>
<tr>
<td>November 9</td>
<td>Angel and Bridge Financing/Trends</td>
<td>Rob Kornegay</td>
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## 2018

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<tr>
<th>Date</th>
<th>Topic</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>January 11</td>
<td>Venture Capital Financing/Trends</td>
<td>Dan Koeppen</td>
</tr>
<tr>
<td>February 8</td>
<td>Term Sheet Workshop</td>
<td>Zach Myers</td>
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[http://innovation.ucsd.edu/entrepreneurship-seminars/](http://innovation.ucsd.edu/entrepreneurship-seminars/)
FORMING & ORGANIZING THE STARTUP ENTITY

Presenter: Rob Kornegay
Rob Kornegay is a corporate and securities partner resident in Wilson Sonsini Goodrich & Rosati’s San Diego and Palo Alto offices. Rob joined the firm in 1994 and became a partner in 2001. His practice focuses primarily on the representation of technology, life science, and other emerging growth companies throughout the United States and internationally. These companies range from start-ups to large public companies as well as sources of capital for such companies. Specifically, Rob represents:

- Public and private companies in merger and acquisition transactions;
- Issuers, investors, and underwriters in public and private financings; and
- Public and private companies with respect to corporate governance matters related to strategic transactions and special situations, as well as in ongoing corporate and securities law matters.

Representative recent clients and engagements include:

- Corporate, securities, and governance representation of numerous public and private issuers, including Occam Networks, MaxLinear, Mindspeed, Fluidigm, Copart, 3Par, DisplayLink, ClairMail, and Real Networks
- Issuer-side public offerings by various issuers, including MaxLinear, 3Par, Occam Networks, Copart, Turnstone Systems, Inktomi, and Oncothyreon
- Financing transactions on behalf of numerous venture-capital-backed issuers, including Fluidigm, MaxLinear, Occam Networks, Silicon Optix, DisplayLink, ClairMail, and Bloom Energy
- Acquisitions, dispositions, and other strategic transactions by numerous public and private companies, including Mindspeed, Transcept Pharmaceuticals, PC-Tel, Copart, Occam Networks, and Silicon Optix

EDUCATION:

- J.D., UCLA School of Law, 1993
  Comment Editor, UCLA Law Review
- M.B.A., (Specialization in Finance), University of Chicago Graduate School of Business, 1989
- A.B., Georgetown University, 1987

ADMISSIONS:

- State Bar of California
Choosing the Form of Business Entity

- Common legal organizations
  - Limited liability company
  - S corporation
  - C corporation
Limited Liability Company

- Limited liability corporation (LLC)
  - LLC members can operate as managers; all owners have limited liability (*i.e.*, only the amount of their investment)
  - No entity-level tax – taxes pass through to LLC members
  - Ownership interests of the “members” are defined and established in the LLC operating agreement

*Why doesn’t an LLC work for a VC-backed start-up?*
S Corporation

- S corporation has board members/shareholders, etc.; but—
  - Tax benefits and losses passed through to the individual shareholders (*i.e.*, a single level of taxation)
  - Early stage start-ups will sometimes take advantage of “S Corporation” status: losses get passed through to the owners

- Requirements for S corporation status:
  - no more than 100 shareholders
  - all individuals (family trusts are OK in general)
  - no “foreign” shareholders
  - only one class of stock (*i.e.*, no preferred stock)

- Simple conversion to C corporation

*Why doesn’t an S corporation structure work for a VC-backed startup?*
C Corporation

- **Attributes of a C corporation**
  - **Corporate governance**
    - Stockholders elect board of directors
    - Board appoints officers, oversees strategic direction
    - Officers manage day to day affairs of the company
  - **No pass through of tax benefits**
    - C corporation is taxed as a separate legal entity (unlike the LLC and the S Corporation).
  - **VCs can invest in it; employees can understand stock incentives**
Where to Incorporate

- Delaware or some other state?
  - Cost
  - Filing services
  - Beneficial corporate law
  - IPO objectives & reincorporation
Start-up Documents: 4 Buckets

- Incorporation documents
- Founder documents
- Employee documents
- Basic third party agreements
Incorporation Documents

- Certificate of Incorporation
- By-laws
- Organizational minutes and resolutions
  - Establish Board
  - Appoint Officers
  - Issue stock
  - Other Administrative matters
Founder Documents

- Invention Assignment Agreement
  - IP assignment
  - Confidentiality
  - Non-compete?
- Founders’ Stock
  - Restricted Stock Purchase Agreement
  - Basic Tax Principles (Sweat Equity Issues)
  - Vesting
  - Acceleration Terms (Single Trigger v. Double Trigger)
  - 83(b) Elections
Employee Documents: Options – What is an option?

- Right to buy Stock at a set price
- Typically granted to employees, board members, advisors and consultants
- Issued through an “option plan”
Employee Documents: Options – Issuing Options

- How boards have traditionally priced common stock in connection with option grants/stock grants
  - Objective is to price the common stock at fair market value
  - Section 409A of the Internal Revenue Code in many cases requires pricing based on an independent valuation

- Every option grant/restricted stock grant has to be approved by the board, and the board has to establish the stock price (i.e., FMV)
  - Result: changes in stock price are determined at board meetings, when the board approves option grants/stock grants
Employee Documents: Options – Section 409A

- Discount stock options are treated as a deferral of compensation under Section 409A
- Stock options covering other than “service recipient stock” provide for a deferral of compensation
  - Only includes common stock \((i.e., \text{does not include preferred stock})\)
  - Options in subsidiary stock potentially problematic
Employee Documents: Options – Section 409A (cont.)

- Tax at time of vesting, not date of exercise
- Potential interest penalty
- Employers have reporting and withholding requirements
Capitalization: Practical Tips

• #1 Get the founders’ stock arrangements right!
  – Make sure the founders are ok with their allocation
  – Establish vesting schedule although the VCs may reverse it later
  – “Buy/sell” arrangements are generally not necessary

• #2: Anticipate up to 50% dilution for first/second rounds
  – Set aside approximately 20% for future employees in the early stage
Capitalization: Practical Tips

- **#3: Establish an overall financing strategy**
  - Create an incentive matrix for all positions in the organization
  - Determine when you need to raise financing and how much
    - Establish milestones that demonstrate viability/progress
    - Expect 4-6 months process from beginning to receipt of funds

- **#4: Address employment issues up front**
  - Noncompetition/Nonsolicitation Agreements
  - Confidentiality/Inventions Assignment Agreements
INTELLECTUAL PROPERTY:
IP STRATEGY & PATENTS

Presenter: Matt Bresnahan
Matt Bresnahan is a senior associate in the San Diego and Los Angeles offices of Wilson Sonsini Goodrich & Rosati, where he has focused his practice over the past 10 years on all aspects of intellectual property, including strategic patent counseling, patent prosecution, licensing, and litigation. Matt is primary outside IP counsel to more than 50 life sciences companies within the biotechnology, molecular biology, pharmaceutical, diagnostic, and medical device fields in Southern California.

Matt has assisted in founding and establishing the IP strategy for more than 25 funded life sciences companies in the past two years. He prosecutes patent applications before the U.S. Patent and Trademark Office (USPTO) and manages and oversees national and international patent portfolios for his clients. Matt has analyzed intellectual property portfolios and performed IP due diligence for both venture capital firms and businesses in a variety of investment environments, including financings, mergers and acquisitions, and initial public offerings (IPOs). He writes opinion letters of counsel, negotiates and drafts transactional agreements, performs IP audits, and formulates and implements IP strategies for both established and emerging growth companies.

Matt draws upon his strong patent litigation background when advising and counseling clients on intellectual property and related business matters on a day-to-day basis. He has litigated patent, trademark, trade-secret theft, and trade-dress IP disputes in a diverse range of technical areas. He successfully tried a three-week patent case in federal court concerning a small molecule therapeutic treatment that was settled favorably for his client after closing arguments and prior to verdict. Matt has successfully obtained favorable institution orders and final written decisions of unpatentability in inter partes review proceedings before the USPTO with respect to patents protecting therapeutic products having billions of dollars in sales per year that would have otherwise blocked commercial launch of his client's products.

Matt is an adjunct professor of law at the University of San Diego School of Law, where he has taught patent law for the past five years.

Prior to joining the firm in 2007, Matt assisted the Honorable Rudi M. Brewster, a patent specialist judge, in the U.S. District Court for the Southern District of California. Matt assisted Judge Brewster with resolving several high-profile and precedent setting patent trials and other intellectual property proceedings, including patent, copyright, and trademark actions.

**EDUCATION:**
- J.D., University of San Diego School of Law, 2007
- B.S., Biochemistry, California Polytechnic State University, San Luis Obispo, 2004

**ADMISSIONS:**
- State Bar of California
- U.S. District Court for the Central District of California
- U.S. District Court for the Southern District of California
- U.S. Court of Appeals for the Federal Circuit
- U.S. Patent and Trademark Office
Silicon Valley heavyweight Wilson Sonsini Goodrich & Rosati was at the forefront of one of the largest IPOs in the history of the life sciences industry last year, guiding cancer treatment developer NantKwest Inc. to a $207 million debut and placing the firm's life science practitioners squarely on Law360's Life Sciences Groups of the Year.

Wilson Sonsini advises an impressive array of life sciences companies on both public and private equity and debt financings, M&A, securities and corporate governance matters. In July 2015, the firm represented NantKwest in the largest biotech IPO ever, based on market capitalization.
Advise Leading Life Sciences Companies on Their Most Important M&A Transactions

**Genentech**

Acquired by Genentech (Roche Group)
August 27, 2014
$1.7 billion

- Genentech, a member of the Roche Group, has acquired Seragon Pharmaceuticals, a privately held biotechnology company spun out of the 2013 sale of Aragon Pharmaceuticals to Johnson & Johnson. With this acquisition, Genentech obtained rights to Seragon’s entire portfolio of investigational next-generation oral selective estrogen receptor degraders (SERDs), for the potential treatment of hormone receptor-positive breast cancer.

**Aragon Pharmaceuticals**

Acquired by Janssen Research & Development, LLC
August 19, 2013
$1 billion

- Johnson & Johnson has acquired Aragon Pharmaceuticals, a privately-held pharmaceutical discovery and development company focused on drugs to treat hormonally-driven cancers. Development of compounds from Aragon's androgen receptor antagonist program, including its lead androgen receptor signaling inhibitor, ARN-509, will be managed by Janssen Research & Development, LLC.
  - "The acquisition strengthens our prostate cancer pipeline with a second-generation, potentially best-in-class compound," said Peter F. Lebowitz, M.D., Ph.D., Global Therapeutic Area Head, Oncology. "It builds on our existing leadership position with ZYTIGA® (abiraterone acetate), and, if approved, we are hopeful ARN-509 will allow us to meet the needs of an even broader range of prostate cancer patients."*

*Source Johnson & Johnson Press release*
Select University and Institutional Spin-outs

**Stanford**
- Stanford-StartX Fund
- Cala Health
- Forty Seven Biosciences
- Annexon Biosciences
- InscoPix
- Agenovir
- VMware
- Soundhawk
- Carmenta Biosciences
- SoniTrack Systems
- Lex Machina

**University of Chicago**
- Bump Technologies
- UProspie
- Neurocern

UCSan Diego, UCLA, & other UCs
- Oncternal Therapeutics
- Vektor Medical
- RetroSense Therapeutics
- Velox Biosystems
- Toromedes
- Naked Biome
- MaxBioPharma

**Other Universities**
- PolyDrop
- Aurora algae
- RiverTop Renewables
- TaggPic
- Pacific Biosciences
- Illumina
- 3Scan
- CREE
- Emulate
- Aileron Therapeutics
- PhaseRx
- D:Wave
- AbVitro
- KenSci

**Other institutions**
- AMBRI
- Storing Electricity for our Future
- DMD Therapeutics
- Imprint Energy
- Caribou Biosciences
- Genentech
- Tempo
- Verdezyne
- Novonco Therapeutics
- Siluria Technologies
- Arrogene
- Blaze BioScience

*Some former or acquired clients included*
Current Startup Financing Market

- Financing is possible, and a key to obtaining it is to protect your inventions – VCs have become increasingly risk intolerant...

- In an innovator company (e.g., a life science, clean tech company, certain electronic companies), in essence, a large part or even all of the value in the early stage is found in the IP

- You **must** have this part right
Forms of Protection Used

- Most companies use ALL forms of IP protection, to some degree
  - **Patents**
  - Trade Secrets
  - Copyrights
  - Trademark
  - FDA exclusivity

- Patents are without doubt the most important form of IP for innovator companies
  - For example, a life science company will register its name, make efforts to keep day to day things secret, but rely (roughly) entirely on its patents
PATENT STRATEGY FOR THE NEW ENTERPRISE

Protecting the Technology
Patent Strategy Enables Business Goals

1. Conduct analysis of patent landscape
   - Assess freedom to operate of competitor potential products and services
   - Spin-out university technology

2. Protect Your Product/Service
   - Obtain patent protection directed to product or service
   - Broad, intermediate, and specific protection
   - Life Cycle Management Strategy

Business Goals
   - Secure Financing
   - Enable Exit Strategy
The Role of Patents In Business

- Companies create value by providing products and services that satisfy **customer needs**
- Products that include features that are particularly attractive to customers – lower cost, increased efficiency, new capabilities – have a **competitive advantage** in the market
- Patents create a “**zone of exclusion**” for a company’s products, thereby securing this competitive advantage
  - “**Meaningful exclusionary power**” is the power to exclude competitors from the attractive product features that drive value
- Know the purpose of the patent and your **audience**: investors, partners, licensors, and litigation targets
Key Strategic and Regulatory Questions

**IP Strategy must be guided by Business Strategy**

- What is the **Target Product** and **Treatment**?
- Who are the **Competitors** and what are they doing?
- Which group of **Investors** is the primary audience for IP diligence review?
- What is the **Exit Strategy**?
What is a Patent?

- A patent conveys the right to exclude others from making, using or selling the claimed invention for the term of the patent
  - Does not mean you are free of the patents of others
- Term: 20 years from filing (roughly)
- Patents are issued by individual countries
  - Enforcement is limited to within country’s borders
  - It is expensive, especially outside of the United States
- A competitor can be stopped, even if they come up with the idea later, but independently (cf. trade secrets)
Requirements for Patentability

- Subject matter eligibility
- New – or “Novel”
- Inventive – or “Non-obvious”
  - Obviousness is a function of time
  - Early filing reduces the amount of prior art
- You must describe to the world how to make/use the invention
Novelty: A single prior art reference

asserted prior art

patented claim

invalid
In Determining Obviousness, Assume That All the Relevant Prior Art Is Known to a Person of “Ordinary Skill”
How Do Examiners Show Obviousness?

If multiple pieces of prior art have all the elements of a patent claim and one of ordinary skill in the art would have been able to combine them, then the claim is invalid.

If one piece of prior art contains most of the elements of a patent claim and one of ordinary skill in the art would have added anything that is missing, then the claim is invalid.
The Edison Hypothetical

• If one paper teaches glass bulbs

• And another paper teaches inert gas

• And another teaches wires

• BUT there is no reasoned basis to combine them, is the incandescent light bulb patentable?
Preserving Patent Rights

- “Absolute” novelty required
  - You cannot publicly talk/publish/present about something prior to patent filing
  - Limited Exception in US → Not a strategy but a fix

- File applications before public disclosures, publications, or offers for sale
  - Do not rely solely on NDAs
  - The “currency” issue at universities
Patent Prosecution Timeline

- Provisional App. (PA) Filing Date
- Nonprovisional App. Filing Date
- PCT Application Filing Date
- Direct Int'l Filing
- Entry into Nat'l Stage (<20 months - >30 months post PCT Priority date)
  - (JP ~ 6 years prosecution)
  - (NO ~ 7 years prosecution)
  - (EP ~ 5 years prosecution)
- Issue of Country 1 Patent
  - (Country 1 ~ 2-6 years prosecution)
- Issue of Country 2 Patent
  - (Country 2 ~ 3-8 years prosecution)
- Issue of Country 3 Patent
  - (Country 3 ~ 4-7 years prosecution)
- Issue of JP Patent
- Grant of EP Member Patents (17 member countries)
- EP Opposition (Starts 8 months post grant) 2-3 Years
- Appeal 1-3 years
- Issue of NO Patent
- Expiration of US & Int'l Patents without Patent Term Adjustment

*Publication of Applications* (Some US Exceptions) 18 Months Post Priority Date
## Provisional vs. Non-provisional Patent Applications

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<tr>
<th>Provisional</th>
<th>Non-Provisional</th>
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<tr>
<td>• Extends patent protection into the future by 1 year (does not start the 20 year of patent term)</td>
<td>• Starts the 20 year clock for patent family</td>
</tr>
<tr>
<td>• Inexpensive</td>
<td>• Fastest way to get issued patents</td>
</tr>
<tr>
<td>• No formatting required</td>
<td>- Track I option and Petitions</td>
</tr>
<tr>
<td>• If intervening art, support may be questioned</td>
<td>• Gets into the queue for examination</td>
</tr>
<tr>
<td>• Provisional is pending for 1 year</td>
<td>• More expensive</td>
</tr>
<tr>
<td>- Best strategy is to file multiple provisionals in one year time frame</td>
<td>• Requires full spec, claims, and figures</td>
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<tr>
<td>• Delays prosecution</td>
<td>• Typically ~2-4 years for examination, but consider:</td>
</tr>
<tr>
<td>• No claims required, but make sure inventorship is correct (anyone who contributed to novel aspects in specification)</td>
<td>- Track I</td>
</tr>
<tr>
<td></td>
<td>- Petitions to make special</td>
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Prioritized Examination → Use It!

- An applicant can request prioritized examination for a fee—$4,800 (reduced by 50% for small entity).

- Limitations: no more than 4 independent claims, no more than 30 total claims, and no multiple dependent claims.

- Benefit: “Thumbs up” or Thumbs down” w/in 12 months

- **Strategy**: Use prioritized acceleration for all key cases, but be reasonable in claim scope for initial case and the favor will be returned
INTELLECTUAL PROPERTY: LICENSING

Presenter: Miranda Biven
Miranda Biven is a partner in the technology transactions practice at Wilson Sonsini Goodrich & Rosati. Her practice focuses on the life sciences industry, representing public and private companies based in the United States and abroad in complex partnering and licensing arrangements, mergers, acquisitions, divestitures, spin-outs, and other business arrangements. Miranda counsels clients on the legal and business issues associated with such transactions, as well as the full spectrum of technology and intellectual property-based agreements, including research and development agreements; manufacturing, supply, and distribution agreements; clinical trials arrangements; materials transfer agreements; and commercialization and co-commercialization agreements. She also regularly represents clients in their dealings with academic institutions and other not-for-profit organizations.


EDUCATION:

- LL.M., Harvard Law School
- B.A.(First Class Honours), University of Sydney
- LL.B.(First Class Honours), University of Sydney

ADMISSIONS:

- State Bar of California
- State Bar of New York
- State Bar of New South Wales (Australia)
LICENSING

Accessing the Technology
Select University and Institutional Spin-outs

UCSan Diego, UCLA, & other UCs
- ONCTERNAL therapeutics
- vektor MEDICAL
- RetroSense THERAPEUTICS
- Velox Biosystems
- MAXBioPharma
- NAKED BIOME™
- CARIBOU BIOSCIENCES
- Genentech

Other Universities
- PolyDrop
- Aurora algae™
- rivertop
- PACIFIC BIOSCIENCES™
- TaggPic
- 3Scan
- CREE
- emulate
- emulogene
- PhaseRx
- FLUIDIGM®
- AMBRI Storing Electricity for our Future
- D:WAVE
- AbVITRO
- KenSci

University of Chicago
- bump Technologies
- UProspie
- neurocern

Stanford
- SuperMetalix
- IMPRINT ENERGY
- Tempo
- verdezyne
- StartX
- CAŁA HEALTH
- FORTY SEVEN
- annexon biosciences
- iNSCOPIX
- vmware
- soundhawk
- Garmenta BIOCENSE
- SoniTack Systems
- Lex Machina

Other institutions
- DMD Therapeutics
- AILERON THERAPEUTICS
- illumina
- 3Scan
- AMBRI
- D:WAVE
- AbVITRO
- KenSci

*Some former or acquired clients included
UC San Diego’s Office of Innovation and Commercialization executes hundreds of agreements each year, including confidentiality agreements, MTAs (for outgoing materials), and licenses.

- It has received between 50-94 new US patents yearly for the past several years.
- It has approximately 400 active licensees of UC San Diego's intellectual property, with around half in California and around 10% to entities outside the US.
- UC San Diego’s OIC recently celebrated its 20th anniversary.
- Donna M. Shaw, Ph.D., CLP - Assistant Director, Life Science Licensing
donnashaw@ucsd.edu | TEL(direct): 858.534.6086
Getting the Ball Rolling

Disclosure

- Inventors report inventions to their technology transfer offices
- Patentability, commercial potential, etc. evaluated; marketing for potential licensee begins
- Case referred to patent attorney who may file for patent; inventor assigns patent to University/Institution at filing

Processing and Review

Patenting and Marketing

- Meet with the Innovation and Commercialization office to discuss your goals
- Make commercial potential clear from beginning
Faculty Founders

- When a company is formed, often the faculty member does not leave his or her post
- Faculty member may serve as a consultant and be on the Company’s Scientific Advisory Board
  - Normally, a 20% limit on time
- Company may put in place a Sponsored Research Agreement with faculty member’s lab
- Faculty members need to check with the relevant administrative departments to understand policies governing participation in outside activities
  - Policies generally address IP ownership, managing conflicts of interest and limitations on faculty members’ outside commitments
Licensing: Steps for Success

- Get Prepared
- Get an Option / Negotiate a Term Sheet
- Create a Schedule
- Use the University’s License As a Starting Point
- Make it Win-Win
Get Prepared

- Understand what you want to license
  - Patent rights/Know-how/software/other

- Evaluate the business opportunity
  - The product
  - Market size
  - Existing players
  - The technology fit
  - Pricing/margins
  - Investment requirements

- Talk to others
  - Colleagues/Friends
  - Attorneys
Get Prepared - IP Diligence

- Patents:
  - Patents/Applications – scope
  - Prior art
- Inventorship/ownership
- Third party patents?
- Any other relevant licenses?
- Do you have all the rights you need?
- Turn a risk into an asset
License Negotiations: First Steps

- Letter of Intent (LOI), term sheet or both?
- LOI
  - Objective: Obtain an exclusive right to negotiate a license to the technology of interest for a defined period
  - Quid Pro Quo (usually there is one)
    - Fee (usually nominal, if at all)
    - Pay for ongoing patent costs
- Term Sheet
  - Allows you to resolve key business issues first
  - Avoids getting mired in the weeds
  - Who prepares the first draft?
  - Use the technology transfer office’s form, if available
- UCSD also has a start-up license model which may be appropriate for your company
## Typical Key Points

### Economic Terms
- Upfront
- Royalty
- Milestones
- Sublicensing Revenue
- Patent Costs
- Equity?

### Non-Economic Terms
- Scope of IP (subject matter, field of use)
- Exclusivity
- License / option to new IP?
- Diligence
- Sublicensing Restrictions
- Patent Prosecution & Enforcement
- Assignment

### Non-Negotiable
- Retained Rights
- Indemnification
- Product Liability
- Right to Publish
- Use of Name
- Warranty
- Governing Law (California)
Use the University’s Template

- Starting with university’s form facilitates negotiations
  - Addresses University’s needs/concern in a familiar way for TTO
  - Often specific language has been mandated
  - Reduces initial drafting costs

- You will get an opportunity to propose revisions appropriate for the technology being licensed and your business plans

- Things that are generally required:
  - Indemnification
  - Insurance
  - Diligence

- Things you won’t get:
  - Ownership of university inventions
  - Ability to block publication
  - Extensive representations & warranties
Make It Win-Win
(It’s only the beginning)

- Communication is key
- The negotiation/agreement is only the beginning of the relationship
- Stay above the fray
- Keep perspective—it’s about creating a successful company, not getting a perfect agreement
BUSINESS PLANS & FUNDRAISING TRENDS

Presenter: Rob Kornegay
The Business Plan

- **Purposes**
  - Convey to others (*i.e.* investors) what you (will) do with their money
  - Force yourself to figure out how you will do it
  - Demonstrate to others (*i.e.* investors) that you really understand the space and have thought about all the challenges
The Business Plan

- Purposes
  - Convey to others (*i.e.* investors) what you (will) do with their money
  - Force yourself to figure out how you will do it
  - Demonstrate to others (*i.e.* investors) that you really understand the space and have thought about all the challenges
The Business Plan

- Executive summary
  - Elevator pitch
- PowerPoint business presentation
  - Deeper consideration
- Financial and projections
  - Include disclaimer!
Executive Summary

- 1-2 pages
- Easy to read and navigate
- Highlights:
  - Team
  - What do you do?
  - What is the addressable market?
  - What makes you different?
  - How far along are you and what’s next?
- This just starts the dialogue – it’s not a Ph.D. thesis
PowerPoint Business Presentation

- No more words than necessary
- Don’t waste time on the obvious
- 10-15 slides
- Same substantive points as Exec Summary, but now with 1-2 slides per point rather than 1-2 sentences
  - Third party market data
  - Revenue model
  - Differentiators
  - The team and key advisors (one slide)
Financials and Projections

- Income statement, Balance sheet, Cashflow statement
- How does funding accelerate growth?
- How long does the funding take you and how much more do you need then?
- Don’t: “The market is $50B, but we are conservative, assumed we’ll get merely 6% and cut that by 60%.”
- Everyone knows the projections won’t come true – it’s the process and thinking that counts, and yes, it’s a test.
Exercise for Working on Your Business Plan

- Identify your 4-5 top risks and uncertainties
  - What can be done to reduce key risks pre-financing?
  - What can be done to reduce key risks cost-effectively post-financing?

- Identify your use of proceeds and how a cash infusion may accelerate growth, timing, etc.

- Identify other elements beyond cash that you want investors to bring to the table (*i.e.*, partners, additional management, strategic perspective, etc.).
Presenter: Zach Myers

INTRODUCTION TO TERM SHEETS
Zach Myers is an associate in the San Diego office of Wilson Sonsini Goodrich & Rosati, where he specializes in corporate and securities law, including mergers and acquisitions, venture capital financings, and general corporate representation. Zach also has experience in technology licensing and has advised clients on numerous licensing and technology transfer agreements.

Zach was formerly an attorney with Sempra Energy and Pillsbury Winthrop Shaw Pittman LLP in San Diego. Prior to law school, Zach worked as an accountant in the audit department at Deloitte and Touche. Zach is a certified public accountant (inactive) licensed by the state of California.

EDUCATION:

• J.D., University of San Diego School of Law  
  *Cum Laude; Order of the Coif; Member, San Diego Law Review*
• B.A., Economics, Claremont McKenna College

ADMISSIONS:

• State Bar of California
Preferred Stock - Term Sheet

- Preferred stock
- Valuation/option pool
- Liquidation preference
- Dividends
- Conversion features
- Antidilution protection (stock splits, price-based)
- Voting rights
- Board composition
- Redemption

- Registration rights
- ROFR/Co-sale
- Preemptive rights
- Pay to play
- Founder/employee vesting
- Non-competes
- Exclusivity
- Expenses
- Confidentiality
Median Amount Raised – Equity Financings
Private Company Financing Deal Terms (WSGR Deals)

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| Participating vs. Non-participating         |                 |                |                |                |                |                |                |                |                |                |                |                |
| Participating - Cap                         | 18%            | 12%            | 8%             | 9%             | 20%            | 14%            | 11%            | 10%            | 23%            | 13%            | 12%            | 22%            |
| Participating - No Cap                      | 12%            | 14%            | 11%            | 11%            | 10%            | 11%            | 12%            | 13%            | 30%            | 32%            | 35%            | 4%             |
| Non-participating                           | 70%            | 74%            | 81%            | 81%            | 69%            | 76%            | 77%            | 77%            | 48%            | 55%            | 53%            | 74%            |

| Dividends                                   |                 |                |                |                |                |                |                |                |                |                |                |                |
| Yes, Cumulative                             | 12%            | 13%            | 3%             | 6%             | 12%            | 11%            | 3%             | 7%             | 13%            | 24%            | 24%            | 22%            |
| Yes, Non-cumulative                         | 74%            | 72%            | 82%            | 73%            | 79%            | 74%            | 86%            | 78%            | 79%            | 71%            | 76%            | 70%            |
| None                                        | 14%            | 15%            | 15%            | 21%            | 9%             | 15%            | 11%            | 15%            | 8%             | 5%             | 0%             | 9%             |

| Anti-dilution Provisions                    |                 |                |                |                |                |                |                |                |                |                |                |                |
| Weighted Average - Broad                   | 90%            | 85%            | 80%            | 92%            | 94%            | 90%            | 86%            | 92%            | 95%            | 92%            | 75%            | 91%            |
| Weighted Average - Narrow                  | 3%             | 9%             | 13%            | 1%             | 3%             | 6%             | 12%            | 1%             | 0%             | 5%             | 19%            | 0%             |
| Ratchet                                     | 1%             | 1%             | 1%             | 1%             | 0%             | 1%             | 1%             | 2%             | 3%             | 0%             | 0%             | 0%             |
| Other (Including Blend)                    | 1%             | 1%             | 1%             | 3%             | 1%             | 1%             | 1%             | 3%             | 0%             | 0%             | 0%             | 0%             |
| None                                        | 5%             | 4%             | 5%             | 3%             | 2%             | 2%             | 1%             | 2%             | 3%             | 3%             | 6%             | 0%             |

| Pay to Play - Series B and Later            |                 |                |                |                |                |                |                |                |                |                |                |                |
| Applicable to This Financing                | 5%             | 4%             | 5%             | 5%             | 1%             | 1%             | 3%             | 3%             | 15%            | 16%            | 18%            | 9%             |
| Applicable to Future Financings             | 1%             | 0%             | 1%             | 1%             | 1%             | 0%             | 0%             | 1%             | 0%             | 0%             | 12%            | 0%             |
| None                                        | 95%            | 96%            | 94%            | 94%            | 98%            | 99%            | 97%            | 96%            | 85%            | 84%            | 71%            | 91%            |

| Redemption                                  |                 |                |                |                |                |                |                |                |                |                |                |                |
| Investor Option                             | 19%            | 17%            | 13%            | 11%            | 20%            | 22%            | 19%            | 20%            | 33%            | 24%            | 12%            | 9%             |
| Mandatory                                   | 1%             | 3%             | 2%             | 2%             | 2%             | 3%             | 3%             | 3%             | 0%             | 3%             | 0%             | 0%             |
| None                                        | 80%            | 80%            | 85%            | 87%            | 78%            | 75%            | 78%            | 77%            | 67%            | 74%            | 88%            | 91%            |

1 We based this analysis on deals having an initial closing in the period to ensure that the data clearly reflects current trends. Please note that the numbers do not always add up to 100% due to rounding.
2 Includes flat rounds and, unless otherwise indicated, Series A rounds.
3 Note that the All Rounds metrics include flat rounds and, in certain cases, Series A financings as well. Consequently, metrics in the All Rounds column may be outside the ranges bounded by the Up Rounds and Down Rounds columns, which will not include such transactions.
## Bridge Loans Deal Terms (WSGR Deals)

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<td>19%</td>
<td>19%</td>
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<td>7%</td>
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<td>17%</td>
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<td>24%</td>
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<td>Maturity 12 months</td>
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<td>9%</td>
<td>5%</td>
<td>38%</td>
<td>39%</td>
<td>8%</td>
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<td>Maturity more than 12 months</td>
<td>78%</td>
<td>71%</td>
<td>74%</td>
<td>78%</td>
<td>33%</td>
<td>37%</td>
<td>58%</td>
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<td>Debt is subordinated to other debt</td>
<td>25%</td>
<td>22%</td>
<td>15%</td>
<td>20%</td>
<td>56%</td>
<td>48%</td>
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<td>Loan includes warrants</td>
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<td>3%</td>
<td>8%</td>
<td>34%</td>
<td>19%</td>
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<tr>
<td>Warrant coverage less than 25%</td>
<td>0%</td>
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<td>Warrant coverage at 25%</td>
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<td>Warrant coverage greater than 25%</td>
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<tr>
<td>Principal is convertible into equity</td>
<td>100%</td>
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<td>93%</td>
<td>97%</td>
<td>94%</td>
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<td>Conversion rate subject to price cap</td>
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<td>64%</td>
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<td>91%</td>
<td>81%</td>
<td>78%</td>
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<td>Discount on conversion less than 20%</td>
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<tr>
<td>Discount on conversion at 20%</td>
<td>60%</td>
<td>72%</td>
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<td>76%</td>
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<td>12%</td>
<td>38%</td>
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<td>27%</td>
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<td>Conversion to equity at same price as other investors</td>
<td>9%</td>
<td>16%</td>
<td>18%</td>
<td>13%</td>
<td>35%</td>
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1. We based this analysis on deals having an initial closing in the period to ensure that the data clearly reflects current trends. Please note that the numbers do not always add up to 100% due to rounding.
2. Of the 2013 post-Series A bridges with warrants, 24% also had a discount on conversion into equity. Of the 2014 post-Series A bridges with warrants, 38% also had a discount on conversion into equity. Of the 2015 post-Series A bridges with warrants, 58% also had a discount on conversion into equity. Of the 2016 post-Series A bridges with warrants, 33% also had a discount on conversion into equity.
3. Of the 2016 pre-Series A convertible bridges, 90% had automatic conversion and 10% had voluntary conversion. Of the 2016 post-Series A convertible bridges, 92% had automatic conversion and 8% had voluntary conversion. The median dollar threshold for a qualified financing in pre- and post-Series A bridges was $1M and $4M, respectively.
4. Of the 2016 pre-Series A bridges, 90% had a median price cap of $6M. 2016 post-Series A bridges had a median price cap of $25M.
5. Of the 2013 post-Series A bridges that had a discount on conversion into equity, 15% also had warrants. Of the 2014 post-Series A bridges that had a discount on conversion into equity, 10% also had warrants. Of the 2015 post-Series A bridges that had a discount on conversion into equity, 21% also had warrants. Of the 2016 post-Series A bridges that had a discount on conversion into equity, 8% also had warrants.